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L. MULLER, Jr., Manager. ROBERT CRAIK McLEAN, Editor.

**SPECIAL CONTRIBUTORS:**

DANKMAR ADLER,	D. H. BURNHAM,	W. L. B. JENNEY,
HENRY VAN BRUNT,	P. B. WIGHT,	IRVING K. POND,
LOUIS H. SULLIVAN,	ALLEN B. POND,	J. R. WILLETT,
WILLIAM S. MACHARG.	C. E. ILLSLEY.	W. F. FITZPATRICK.

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**Timely  
 Comment  
 Upon the  
 Tarsney Act.**

Attention is particularly called to the leading article in this number from the pen of Mr. Dankmar Adler, who makes timely and pertinent comment upon the operation of the Tarsney act. Mr. Adler voices the views of this journal in this particular, and will follow in next issue with similar comment upon the manner in which architects can best aid the Secretary of the Treasury in securing the most beneficial results from the operation of the act, both for the people and the architectural profession.

**End of the  
 Harrisburg  
 Competition  
 Fiasco.**

The commissioners representing the State of Pennsylvania, in securing designs for a capitol building, on October 23 formally adopted a design and plan submitted by Henry Ives Cobb, of Chicago. Whether these commissioners are of a higher class mentally and morally than the average State capitol commissioner it is hard to judge, as in defense of their total disregard for the binding character of the original competition programme, the conditions of which they violated, it has been claimed by the commissioners that the competitors first violated the agreement by exceeding the limit of cost. Now that Mr. Cobb has been appointed the matter can certainly rest, as this action of the commissioners has placed all chance of any misuse of State funds beyond the power of manipulation by them or anyone else. Architecturally the design will be creditable, and if the building costs more in the end than was originally appropriated, it will be at the wish of the people, and every dollar appropriated will be spent on the building and go as far as possible commensurate with good construction. While the appointment of Mr. Cobb does not place the action of the commissioners in regard to the original competition in a more favorable light, it ends the matter in a much more creditable manner than the outlook promised. The incident, as a whole, will cause architects to look with less favor than ever upon competitions for public buildings.

**An Important  
 Decision  
 in a Non-  
 Union Case.**

An important decision has just been rendered by Justice Beach, of the New York Supreme Court, which will have a strong bearing on the interference of trades unions in their war upon the rights of non-union workmen. The decision in question enjoins the United Portable Hoisting Engineers' Union and its walking delegate from interfering with a non-union workman, and also orders the union to pay him \$500 damages for having kept him from working from June, 1895, to August, 1896. The workman proved when at the trial that the walking delegate had called on various firms where he had obtained employment, and secured his discharge by threatening a strike on the buildings unless the non-union workman was discharged. In his decision, Justice Beach says, should such proceedings be tolerated, workingmen, though competent and willing, would be unable to earn a living. This difficulty has been long recognized in all large cities, and in some it has been impossible for a workman to obtain employment unless he became a member of a union. It was only recently that a suicide occurred through a workman becoming discouraged because he could not earn bread and also pay a contribution to a union, and thus be able to obtain work. It is time the right of a man to live in this country outside of a prison was not only recognized, but that such a right under the Constitution should be upheld by the full force of the Federal government. The decision of Justice Beach is as plain and as equitable as the Constitution, and it may be that the time is near when a workingman, though he does not choose to join a union with his fellow-craftsman, will have some rights that others are compelled to respect.

### THE TARSNEY ACT AND THE AMERICAN INSTITUTE OF ARCHITECTS.

BY DANKMAR ADLER.

**I**N the address with which President Post opened the thirty-first annual convention of the American Institute of Architects he stated that "the Tarsney act . . . requires serious amendment and the architects of the Institute should make a renewed effort to secure early action." Mr. Post neglected, however, to state in what particulars such amendment seemed necessary, unless we assume it to be in the matter of remuneration of expert assistants employed by the Secretary of the Treasury in connection with the determination of architectural competition carried on under the provisions of the Tarsney act, which was referred to informally in the course of the proceedings of the convention by its president.

Whoever has had experience in the management of horses has observed animals who would fearlessly approach and stand by locomotives, steam rollers and other grewsome phenomena and shy at a piece of paper lying in the road. A good driver will by an encouraging word and a mere touch of the whip teach his horse that it is better to go along his way than to stop in awe-struck contemplation of the possible horrors which that piece of paper conjures up before the imaginative faculties of the equine soul. An ill-tempered driver, however, will give his horse some realization of the imagined dangers and will unite with the horse in working up an exhibition of human and equine eccentricity and perversity, winding up, perhaps, in a runaway and smash-up, calls for patrol wagon, horse ambulance, repair shop, etc.

So Mr. Carlisle, when Secretary of the Treasury, faced enormous Treasury deficits, and fifty-million dollar loans, and also the struggle between gold and silver standards without blinking, but shied and afterward balked at the idea of exercising the discretionary power given him under the Tarsney act to institute architectural competitions and employ private architects for public buildings. When that thoroughbred Kentucky pacer began to shy at that simple little clause of the Tarsney act it ought not to have been a difficult matter for President Burnham and the Directors of the American Institute of Architects to have shown the harmlessness, even to a Democratic politician from Kaintuck, of the procedure left by the Tarsney law to the discretionary power of the Secretary of the Treasury.

Instead of following the example of the committees of the Institute which had charge of the Tarsney bill when it was before congressional committees and before Congress itself, and treating the matter as a political measure and arguing from the standpoint of the politician, and proving to the politician Carlisle that it might be good politics to please the architects of the country at large and to utilize politically the new powers conferred upon him by the Tarsney law, they proceeded to bombard the shying Kentuckian with Olympian fulminations about the duty of the Government to the cause of art and all sorts of other things unintelligible and terrifying to the spoils politician.

The result was runaway, smash-up, an altogether unnecessary relegation of the Tarsney bill to the junk pile, three years of earnest effort wasted upon the McKaig bill, and then the discovery by that cool-headed driver, President Post, that the heels of the balking Kentuckian had scarcely injured even the dashboard of his chariot, and that the Tarsney bill was quite fit, as the typical coach and four, for the feat of driving through the office of the Supervising Architect of the Treasury Department to the goal so long and so arduously striven for by the American Institute of Architects.

But in uttering the words quoted at the beginning of this article, is not Mr. Post leaving the driver's seat which he has occupied so efficiently, and placing himself in the attitude and condition of the horse, which is getting ready to shy at another trifle? Is he justified in asking the Institute to assume a position of criticism and fault-finding toward a law enacted at the most urgent solicitation of its official representatives before even a year's trial of the working of that law?

For we of the Institute have had our way. Not only have we, after twelve years of unintermittent effort, brought about the enactment of a law which makes it possible for the Government of this country to employ as good architects as are in the service of its individual citizens, but we have also, after four years of further effort, caused the practical application of this law to become part of the policy of the great Treasury Department.

What are we to do now? Shall we expend our energies upon efforts to amend and improve the Tarsney act by further Congressional legislation? Emphatically, no! As interpreted by Secretary Gage and as applied to practice by him with the assistance of the wise counsel of Mr. Post, the Tarsney act, though containing, including its title, but 268 words, has revolutionized the attitude of the Government of the United States toward the architectural profession and bids fair to bring to realization all the aims and projects entertained and advocated by the American Institute of Architects for the elevation of the public architectural service.

The conception and passage of the Tarsney law was brought about by the efforts of many consecutive administrations of the American Institute of Architects. Those who, with the writer, enjoyed the privilege of adding their efforts to the travail of its birth, remembering how long and how hard was the labor which finally gave it being, deprecate the adoption of any policy which might imperil the life of this creature of such protracted and arduous toil on the part of the chosen representatives of their profession, or which might call for similar toil in support of another similar measure.

It will be much wiser if the energies of our profession and those of its representative societies are devoted to the task of supporting Secretary Gage in his well-considered efforts to so administer this law of our making that the character of the buildings reared by the Government of the United States be elevated and their cost in time and money be reduced to such an extent that the people will recognize the beneficent and wholesome influence of the American Institute of Architects, and will turn to it whenever it shall appear expedient to devise means for so amending the Tarsney law as to secure still better and still more efficient architectural service than will be obtainable under its operation in its present form. But let us refrain from the indirect aspersion upon the Tarsney law, and through it upon its parent, the Institute, into which an immediate proposition to seriously amend it would be construed.

Now, turning again to our simile of the shying horse, it appears that even Secretary Gage, while facing without a tremor the perils of a reorganization of the system of finance of the nation, after having accepted without fear the idea of employing for Government service, through the agency of competition, architects of the type chosen by the individual citizens of this country, feels himself obliged to maintain the traditions of his office, and shy at a trifle—not the one found obnoxious by his predecessor—but at another trifle. For it appears, as Mr. Post has unofficially told us, that Mr. Gage cannot find legal justification for employing services of paid expert assistants in deciding the competitions instituted under the provisions of the Tarsney law. Would Mr. Gage, or any other cabinet officer, hesitate as to the employment with suitable remuneration of expert assistants when legal questions are to be determined? Is it found necessary to await the enactment of a law by Congress whenever the Government service demands the employment of help in any of the departments, such, for instance, as draftsmen, designers, computers, clerks, etc., in the office of the Supervising Architect of the Treasury? If these may be so employed, why not experts of higher grade? If architectural competitions are instituted for the good of the public service, are there no funds at the command of the Treasury Department from which their legitimate expenses can be defrayed in cases where such outlay does not go to lawyers or to experts in the lines of interpretations of tariff legislation?

It may be said that thus far the Secretary has not found it difficult to obtain such service gratuitously from architects of the highest standing. But is it right that the Government of the United States should demand from distinguished architects gratuitous service which in similar cases is generously remunerated when rendered by representatives of the legal and other professions?

Therefore, why not assume the equality before the Government, before the law, before the Treasury and before the auditing official, of the professions of law and of architecture? It may seem a queer proposition to Mr. Gage, and perhaps to many architects, that such equality as regards justification of claim for payment for services can exist, but upon second thought is it not a reasonable one?

If the proposition is not reasonable, we are not justified in a demand for legislation for its establishment. But if it is reasonable, why may not Mr. Gage act upon it without further enactments?

### THE NEW SUPERVISING ARCHITECT OF THE TREASURY.

IN the issue of THE INLAND ARCHITECT of last August considerable space was devoted to government architecture, the Tarsney Act and Secretary Gage's decision to place the Supervising Architect under civil service rules. At that time there may have lurked in some architectural minds a suspicion that, in spite of all protestations to the contrary, so important an office as the Architect's (for which there has always been such an undignified scramble at every new administration's induction into power) would be so manipulated, civil service or no civil service, as to become, as usual, an easy berth for some trusted henchman's friend. There was a decided movement in that direction; in fact, this and that architect had his powerful friends, his "influence," wait upon the Secretary and present claims and reasons why *he* should be the favored, the chosen one, only to be received most kindly and — invited to pass an examination before the civil service!

Surely if there were any so suspicious, even they must now be thoroughly convinced that Secretary Gage's administration of the Treasury Department is strictly a business one and ideally conducted upon the lines of civil service reform — his appointment of Mr. Taylor to the supervising architectship would prove that most conclusively to the most doubting of Thomases.

A digression at this point that will further illustrate the stand Mr. Gage has taken for Reform, with a big R, may be pardoned. Some time ago two legal positions were vacant in the Department. The Bar Association, or other legal trades union, waited upon the Secretary to present the names of some candidates. They were invited to compete in examination before the civil service inquisitors, and the invitation was made general. Many competed, among others two young clerks already in the Department. These two happened to stand highest in percentages, and it was rumored that they were to be appointed. There was a loud protest made by the aforementioned legal society.

"These two young men," said the protestors, "were Democrats and should have been barred from competition because they necessarily had the inside track, knew much of the Department requirements, etc., and had, therefore, too many advantages over the outsiders." To which protest the Secretary rejoined that he "did not know nor care what their politics were, but since the two young men not only answered satisfactorily all the general legal quizzing that the others did, but moreover were already well posted in departmental detail and specialties, they certainly were just the men he wanted," and he proceeded to appoint them forthwith.

The invitation to architects to compete in examination for the position of Supervising Architect was made July 21, 1897, and sixty applicants called for blanks. True, the Posts, the Burnhams, the McKims of the profession did not respond, but then neither can the Choates, the Ingersolls, etc., be lured to the bench; still, justice does not fall into innocuous desuetude, and while there were no celebrities clamoring to be heard, there were men of more than local fame anxious to be examined; men whose names are well before the public and whose buildings confront us at every turn. Of the sixty, thirty fell by the wayside and thirty

papers were sent in to the board of examiners. Among these were the papers of Mr. Taylor, who was then chief draftsman in the Supervising Architect's office, and who took the examination more as a test for his own satisfaction of how he stood compared with his peers than with any idea of carrying off the prize, and no one was more surprised at the final outcome than was the successful candidate himself.

After the civil service examiners had gone over the papers, the committee of architects, Messrs. George B. Post, Daniel H. Burnham, Robert Peabody, Theopolis Chandler and John M. Carrère, invited by Mr. Gage to assist the commission, passed them in review and selected the three names they thought best fitted to be submitted to the Secretary. Mr. Howard Constable, of New York, Mr. James Knox Taylor, of Washington, and Mr. George M. Huss, also of New York, were the three selected who stood highest. It is to be presumed that Mr. Gage thought, as he had done before about the law clerks, that since Mr. Taylor not only

knew as much as the others did about architecture, but was also familiar with department routine, he certainly was the man best fitted for the position, and upon that assumption and his personal knowledge of Mr. Taylor's good points, proceeded to appoint him. That there were no politics in the matter may further be inferred from the fact that Mr. Taylor was first appointed as a draftsman in the department under a Democratic administration, before the civil service had folded the Architect's office into its embrace.

Mr. Taylor's appointment is a vindication of the Supervising Architect's office and a most convincing proof that there is as much and as high a degree of talent in that office as can be found outside; and that while there have been most execrable designs turned out from that office, the fault has always been with the men in charge, who generally were politicians, not architects.

Mr. Taylor, personally, is a large man in every sense, broad in mind and large in frame, standing nearly six feet two, and built in proportion; suave and genial, thoroughly liked by superi-

ors, equals and subordinates; sympathetic, yet firm in character; without political debts to pay, and with a Secretary of the Treasury over him who will see that his just recommendations become law and are enforced. He is most admirably fitted to administer the duties of his high office with distinction to himself and profit to his country, and without fear of succumbing to the blandishments or threats of the politicians and others whose handiwork can be traced in so many of our public enterprises.

Mr. Taylor was born in Knoxville, Illinois, October 11, 1857, and after a thoroughly general education entered, as a student, the office of that whole-souled pioneer architect of the West, E. P. Bassford, of St. Paul, through whose hands so many of our young Western architects have passed, and who all retain such pleasant memories of that period in their lives. Then, in 1877, he took a special course at the Boston Institute of Technology. In 1879 he was with C. C. Haight, of New York, and later with Bruce Price, going back to St. Paul in 1885, and practicing there alone and in partnership with Mr. Cass Gilbert — who, by the way, is also fast hewing his way to fame — until 1891, when, in association with Amos J. Boyden, he practiced in Philadelphia until 1895. April 1 of that year he was appointed as draftsman in the Supervising



MR. JAMES KNOX TAYLOR.

First Supervising Architect of the United States appointed under Civil Service rules.

Architect's office, and by dint of application and the display of superior ability he gradually climbed to the position of chief draftsman, so that his present position is really but the regular and well-merited course of promotion — the true aim of civil service reform.

Mr. Taylor, when asked for his views about competition for public work, candidly admitted that they had changed radically since entering into departmental service. He says that while in private practice he had persistently advocated that way of disposing of public work, believing that any one set of men, however expert, could not do justice to, nor be expected to understand local conditions as could local men, nor could they be expected to keep out of a certain rut in design that could be avoided by competition; but since his public service he has seen the difficulties, the complications, that render that mode of procedure as unsatisfactory as the old way, and has about concluded that there must be some other solution of the difficulty, so that he has earnestly set himself to studying what to devise and suggest.

It is not probable that Mr. Taylor will make many changes in his office, some promotions, of course, to fill the vacancy created by his own promotion, but no radical changes.

The Supervising Architect's office is one of the most important bureaus of the Treasury Department — in fact, so important that there has been some legislative talk of detaching it and creating, with it and some of the war and navy divisions, a Department of Public Works, but it will take years of talk and agitation before anything is done in the matter. It is a bureau so technical in its functions that generally Secretaries of the Treasury have failed most dismally in managing its affairs. Secretary Gage is particularly fortunate in having had wide experience with buildings before going to Washington, his World's Fair experience alone being of incalculable worth to him in deciding the many questions that, perforce, have to be referred to him; and to him and him only is Mr. Taylor directly accountable and responsible for the administration of that bureau's affairs. Under Mr. Taylor the service is divided into two branches, the executive and the technical. The former controls the discipline and personnel of the office and branches off into a "Division of Accounts," where all money matters are attended to, payments of contracts or vouchers, etc., and a "Law and Records Division," where all questions at all legal are decided, contracts made, files kept, etc. The technical divisions comprise the "Engineering and Drafting," where all drawings are made, traced and reproduced; the "Computing Division," where specifications are written and estimates made, bids called for and verified upon receipt, etc.; then the "Inspection and Repairs Division," having in charge the carrying on of the work and the care of it when completed.

There used to be other subdivisions, but under Secretary Gage they have been merged into the above, and the business of the office greatly simplified.

It has often been claimed that the Supervising Architect's Office was a far more costly institution to maintain than is a private architect's office doing an equal amount of building per year, but one must remember that it practically is a banking institution as well, a purchasing agent and a bureau of perpetual maintenance for all of the public buildings of this vast country! Truly a successful Supervising Architect must be a "man of many parts," a man of rare executive ability, shrewd in business transactions, ever watchful over his country's best interests, and last, but surely not least, must be an artist. The appointment of Mr. Taylor is generally approved.

#### SUPERVISING ARCHITECT'S EXAMINATION THESIS.

THE thesis submitted by Mr. Taylor in the civil service examination for the office of Supervising Architect may be interesting, as it outlines his views upon the general conduct of the office.

In the selection of a style of architecture for use in a public building, the designer should be governed by three general and important considerations. First, since one of the primary attributes of great power is dignity, the style selected should have that quality. Second, as a public building is the visible sign of the government in a locality, it should be pleasant to look upon and, therefore, the style selected should be beautiful. Third and last, but not least, it should be such as would permit of a convenient interior arrangement.

In taking up that part of my subject referring to the most economical method of constructing public buildings, I take it that this refers to the actual work of construction rather than to the design of such construction. Anyone at all conversant with the results of public buildings must acknowledge that the more completely the element of political influence for purely political purposes can be eliminated and the more closely good business principles and methods can be applied, the more satisfactory will the work be in the end. Any business enterprise will suffer from a continual change of the managing power and a great proportion of the failures in public work can be traced to this one source. Again, the fact that it is public work, and as such must be

open to all to estimate on, regardless of their previous record, is another great factor in the economical question, as the admission of incompetent contractors practically bars out competent ones. The elimination of the custom of subdividing the work into a number of small contracts would conduce greatly to economy, as a better and more rapid construction would result and there would not be the necessity for so much service in the matter of drawings, clerical work, etc. Another point that should receive consideration in this connection is the use of local materials and methods of construction, when suitable, it being usually less expensive to use materials near at hand than those brought from a distance, and thus aid in the development of the various resources of our country.

In taking up the last portion of the subject of this paper, that of the advantages and disadvantages of securing designs for public buildings by competition among American architects, and the same questions relative to having such designs prepared in the office of the Supervising Architect of the Treasury, there is opened up a large field of discussion, and one which presents a number of problems difficult to solve. From the professional standpoint, it is impossible for any one man, be he ever so well fitted for the work, to have as intimate a knowledge of the requirements of buildings in all sections of this great country as have those of his profession who have devoted themselves to the acquisition of experience in the particular section in which any proposed building is to be. Even were it possible for any one man to acquire such knowledge, no one human brain is equal to the task of designing the large number of buildings that are necessary in a year, and turning them out perfect or even nearly perfect of their kind. To be sure he would have the aid of his office assistants, but the same could be advanced in support of a private architect. Moreover, the above is under the supposition that the Supervising Architect can devote his entire time and attention to the work of design, whereas such can never be the case, as there is an immense amount of routine work in connection with repairs to existing buildings, examination of sites for proposed new buildings, furnishing data and information to congressional committees, a large correspondence each day, and an infinite number of smaller matters which demand his attention. An architect selected through competition in the case of each building would not be hampered by these conditions, and could, therefore, devote more time to the design, and being chosen from those of the profession practicing in the locality of the proposed building, and so familiar with the tastes and habits of the people, local characteristics, requirements and materials, he should produce a design more satisfactory than could be obtained under the present conditions.

Relieving the Supervising Architect of this portion of his work would allow him to become in reality what his title would seem to imply. He could devote his attention to seeing personally that the three general considerations stated in the beginning of this thesis were studied, and that the actual work of construction was honestly done. Another advantage gained would be the reduced liability of the designs for public buildings falling into a rut of similarity.

Turning from the professional side of the question and examining it from the official standpoint, it appears that those responsible for the proper expenditure of the public funds would naturally inquire what safeguard is there that the man selected may not be dishonest? As the management of the entire work passes from our control, how is the Government to be protected? The answer should, of course, be made that all men are not dishonest, nor does the Government run any greater risk than does an individual or a corporation. This, however, is but partially true, for from various causes, such as political influence and the feeling that public work should be open to everyone, there comes a greatly increased liability, and unless this be safeguarded very effectually the results from this method of obtaining designs will be far less satisfactory than is the present method. In the same connection comes the question of the selection of the particular man for each piece of work. How is he to be selected? If by competition, how are the competitors to be chosen in order to secure the best? Shall the competition be an open one? or shall certain men be invited? These and many kindred questions immediately arise and must be satisfactorily answered before a perfect result from competition can be obtained. The question of competition has been under discussion by all the leading men as well as the leading societies of our profession for many years, but I have yet to hear that it has been satisfactorily settled or that any method has been found that all will abide by. The question of greatly increased expense that would be entailed on the Government cannot be taken up at present, there being no accurate data obtainable, no work having yet been carried out under this method, from which to draw a comparison.

The above covers very briefly the principal points for and against the two methods, and leaves the preponderance of weight apparently in favor of the first, but with such difficulties in the way that very careful action on the part of all concerned will be necessary and the most stringent and complete safeguards should be provided by law before it is carried into effect.

#### THE AMERICAN TALL BUILDING FROM A EUROPEAN POINT OF VIEW.\*

BY S. HENBEST CAPPER.

IN the "country of wonderful" (and, be it confessed, even wearisome) "distances," *tallness*, of one sort or another, is an ideal pronouncedly sought after, sometimes even held to be, like virtue, its own reward.

Of this the great tower and pinnacle of the city hall at Philadelphia are an unhappy instance. Ill-designed and crowned with a scarcely appropriate statue that is much too big — it is said to be seventeen feet high — this huge architectural failure has little to recommend it but its exaggerated height, which is claimed "to beat the European record." Could any ambition be more futile? Had its builders set themselves to raise a tower more beautiful than anything in Europe, and had they thus "beaten the European record," how grateful would all the world (including Europe) have been to them! And those old towers themselves, of Europe, still after so many centuries the joy of their beholders, would have borne proudly the knowledge of a younger sister more beautiful than they. But at Philadelphia success means to have distorted a design. This wondrous fallacy of beating some one else's record — borrowed, presumably, from that huckstering spirit which has turned the god-like athlete of a Myron into the modern professional of the race-track and the ring — has certainly no place in architecture or in any art. It must, without fail, reduce art to vulgarity.

Take another signal instance — the great memorial obelisk at Washington — and compare it with its prototype. The guide-books tell us that it contains so many thousand blocks of stone, and again that it "beats the European record" by being 555 feet high. What is this obelisk after all? A huge stone casing to an elevator, aping the form of an Egyptian monolith. The obelisk, as reared on the banks of the Nile four thousand years ago, was the most stately, most appropriate form for a high memorial block of stone ever devised; and these old obelisks, graced with their brilliantly-decorative hieroglyphics, are still unrivaled. The ancient Egyptians vied eagerly in the size of those noble blocks;

\* Reprinted from *The Engineering Magazine*, for November, 1897.

the largest weigh several hundred tons; those erected at Karnak by Hat-shep-sut have a fine and most interesting inscription, recording the pride of their founder in the speed and success with which her design had been carried out, and, above all, in the grandeur of scale of these obelisks she had achieved in honor of Amen. But no Egyptian ever dreamed of building a piecemeal obelisk to "break the record." A monolith built of little pieces is a *reductio ad absurdum*, if not a fraud, and was reserved for the glorifiers of that distinguished American who "could not tell a lie."

"Tallness," therefore, as an ideal, is not necessarily right in art; it by no means leads infallibly to artistic success. Height, when achieved with due proportion, is undoubtedly a noble quality in art, appealing deeply to the imagination; but mere "tallness" may be as far as possible removed from well-proportioned height.

Another point, too, may be briefly noted. In matters of taste, familiarity is often an essential factor; in architecture especially, which is, above all, the art of common sense and sobriety, to shock is not to carry ultimate conviction, and any violent departure from accepted standards must emphatically justify itself. Bewilderment is not akin to admiration, nor does gaping wonder tend to intellectual assent.

Probably to most of those who are sufficiently interested in architecture to take heed of contemporary work the "tall buildings" of New York and other cities embody America's chief contribution to modern architectural advance. They have led to new and complicated problems of construction, solved doubtless with all the energy, the boldness, and the address characteristic of American engineering. They also present æsthetic problems of considerable importance and interest, the solution of which is perhaps not so apparently ready or convincing. At any rate, in New York itself, where these "tall buildings" are already fairly numerous, the divergence of design, not merely of ornamental detail, but of radical conception as a whole, is very marked. All is tentative, and all (one might almost add) attempted, for much is extravagant, tried (it seems) if haply the result may justify the trial with a success which aims at rather the clamor of advertisement than the excellence of studied and achieved design.

The problem asking for solution is an eminently modern one. Architecture cannot, on pain of proving untrue to her traditions as a living art, refuse to entertain it, to grapple with it, and eventually to reach a satisfactory solution. We must, I hold, put definitely aside the criticism so often heard: "These tall monstrosities are not architecture at all; they are only engineering, with a stone veneer." They are buildings of our modern city streets; and, if these be not architecture, where indeed is modern architecture to find her place? She is bound to find her own solutions for novel problems, however difficult, and to achieve a harmony between the requirements of today and the accepted canons of artistic sense. It is essentially in responding to the needs of modern complex life, in interpreting and meeting them, that the art itself is modern and living.

The problem is undoubtedly difficult. As usual, it reaches the architect in a somewhat advanced and complicated stage; he has to grapple with it with many data already definitely fixed and binding his design. On a restricted site of enormous initial cost, a building has to be erected of sufficient cubic capacity to "pay."

The financial problem dictates extension by way of height, which, however, creates at once constructive difficulties. These are being met and satisfactorily disposed of by the many expert engineers who have so brilliantly worked out the various novel methods embodied in the construction of these "tall buildings"; several interesting papers in regard to these have recently appeared in the *Engineering Magazine*. New methods of foundation have been evolved, apart from which the main factor in construction is the steel-skeleton structure. The requirements of floor space (dictated by financial needs) rigidly limit the supporting and inclosing walls to the least superficial area compatible with safety and stability. Further, the need for the maximum of light in the interior equally leads to the reduction of wall thickness and external piers, while it forces the engineer to find a substitute for the ordinary diagonal bracing and cross-ties, which are incompatible with windows. With these complicated restrictions, the architect has to design his building, fettered and hampered, or, on the other hand, inspired, it may be—for restriction is ever a fertile cause of happy ingenuity and an occasion for success. Moreover, be it remembered, the architect has here artistic opportunity in height before undreamed of, and quite beyond his reach without the steel-framed structure, which is here the essence of his building.

In the first place, the buildings have the very great advantage of being isolated above street level. They can, therefore, be designed as complete in themselves, in a way that no ordinary street building permits. But they are seen all round, and must be designed as a building in three dimensions, not as a mere street front. In spite of this self-evident fact, some glaring instances to the contrary are in painful evidence. The St. Paul building in Broadway at present is so indescribably maimed in this respect that it can, presumably, be but partially complete. As it stands, a more striking instance hardly could be found of designing a front without looking round the corner, in this case the neglected "round the corner" being considerably more in evidence than the columned stories of the front itself. But any possible design would have been irretrievably ruined by the utter hopelessness of this site in shape and superficial area.

This isolation is, of course, a permanent advantage, for the buildings, to achieve their object, must remain isolated and apart;

if crowded up, their lower stories become correspondingly reduced in value. It is said that this is an economic factor that has already made-itself felt; and it is quite conceivable that in self-defense the "tall buildings" will surround themselves with shorter neighbors, or, in other words, will come to be designed as only the central portions of a larger, lower block. If so, their design will be a good deal modified, probably in marked improvement. At present the lower stories are said to be in little demand, and, as the streets, which are darkened by these buildings, are generally too narrow, it is possible that an expedient may be found corresponding somewhat to the arcaded streets of old Bologna, some portion of the ground space being given in compensation to the darkened streets, to the no small gain of the jostled foot-passenger. This would not necessarily cause the buildings to appear propped up on stilts; it would be more likely to add to the importance of the lowest story by the pillared complexity introduced.

In the second place, where so great height is *de facto* attained, it seems unnecessary to emphasize it in exterior design. A good many of the buildings are designed on the principle of strongly vertical lines carried through many stories. This I venture to think a mistake. It is right for a comparatively slender tower, undoubtedly, where the sole object is height; everyone will recall the noble campanile of St. Mark's at Venice (in the lower and comparatively early portion), as well as many others. These "tall buildings," however, in spite of their tallness, are by no means towers; they are spacious and habitable buildings; to design them as towers is a twofold mistake, both practical and æsthetic; it is their openness, their brilliant lighting, their spaciousness, that should be emphasized, and that can best be done by horizontal treatment of the stories. Moreover, such a treatment would be, perhaps, more in accord with their construction. It is one of the misfortunes of their steel-skeleton construction that it must all be, perforce, concealed. The material, unless buried in a fire and weather-resisting shell, is extremely ephemeral and unenduring. Consequently, the architect lacks that guidance of dominant construction which goes so far to make a design coherent, logical and easy to interpret. Yet it is a fact that these great buildings are erected in horizontal stages, comprising, it may be, several stories each, but still well defined platforms or stages. And these should surely be seized upon if practicable and interpreted in the exterior design. It seems to me that in this way the buildings would very greatly gain in meaning and expression. A word or two may here be suggested in regard to this construction from the æsthetic point of view. Since the Gothic revival, with its battle-cry of "ornamented construction" and its decri of "constructed ornament," it is natural and inevitable, and surely right, to seize first on genuine construction to be interpreted and expressed in a design. Where, then, is there room for this totally concealed construction? Some would, of course, deny *in toto* its right architecturally to exist; metal cased in stone, they claim, is a quite illegitimate method of architectural construction, being a sham of the most flagrant kind. To deny, however, to iron and steel the position they have conquered in the world of modern construction is, of course, wholly futile. But from their perishable nature they must be hidden away for their own protection. How, then, are they to be dealt with? The most obvious method is to case the metal in some form of plastic material, such as terra cotta; steel construction thus treated is quite capable of honesty above reproach. Whether stone is a wholly legitimate substitute for a plastic material thus required to case it in is a good deal more open to question. It is certainly more costly and more difficult to handle; above all, it is a less natural material when so used. We are all so thoroughly accustomed to stone, "solid stone," as a material for the most durable, the most massive and the most solidly constructed buildings, that it is certainly a shock to see it cramped on to a steel backing, treated like a veneer, pared down and pinned and bolted into place. This is certainly not material used in its natural way; it is so unnatural, and shocks so irretrievably, that I very much doubt if it can be accepted æsthetically as so satisfactory as a wholly plastic material. On the other hand, it may be legitimately contended that with stone one can get both color and texture, which are not to be had in any terra cotta or similar material. These are the two sides of a controversy incapable, it seems to me, of dogmatic decision; but I return to the craving at least for horizontal lines in the masonry as opposed to vertical, more especially if these can be made to interpret something of the method of construction in horizontal stages.

In the third place, much and lavish exterior ornament seems wholly out of place. The buildings are themselves so large and so imposing that they do not require enrichment to give them interest; mere surface ornament becomes unmeaning and superfluous; when used on so large a building, it becomes mere frittered labor, painful from its ineffectiveness. Many of the "tall buildings" of New York are rather lavishly ornamented, but the ornamentation is ultimately felt to detract from, not to enhance, their size. The truth is that, in a very large building, an almost monotonous repetition is of potent artistic value. Of this the Flavian Amphitheater at Rome, the so-called Colosseum, is a well-known instance. The steady repetition of the same architectural motive, in an apparently endless series of arcades with engaged columns between, impresses the beholder with an irresistible majesty. Something of the same effect seems attainable in these tall buildings, with their monotonous repetition of similar window openings. And any ornamentation disturbs the resulting impression of solidity and power and scale. It is noteworthy that the "tall buildings" of

old Edinburgh, somewhat famous in their way, are totally devoid of architectural ornament, though singularly effective in the fair city architecture of the "Modern Athens." The most recent type of the "tall building" in New York seems to relegate the ornamentation to the base stories just above the street, and to the top, or crowning, stories. As has been mentioned, the lower stories are said to be of inferior letting value, and are not, therefore, very naturally selected for extra cost in execution. But probably the temptation to enrich the stories within fair reach of the eye from the street level is strong, and artistically is defensible. Above all, the main entrance naturally calls for emphasis and enrichment; one does not expect to enter so imposing a building by any mean or insignificant doorway. The cornice is a great difficulty; it has not, it seems to me, as yet been adequately studied out. In so huge a block of building, it should have a projection unattainable in practice. In Florence the Strozzi Palace (though only a portion of the grand cornice has ever been completed) is a very fine example of a simple cliff-like façade crowned by a rich and noble cornice. In Rome one turns naturally to the grand cornice of the Farnese Palace, in competition for which Michael Angelo waxed so mightily indignant. Both these are classical examples, to which might be added, in more recent times, the Arc de Triomphe at Paris. But beyond this limit it is not possible to go in stone. What, then, are the designers of those "tall buildings" to do? The course generally adopted has been to use metal in place of stone; but the result is necessarily either fraudulent, in so far as the change from stone to metal remains undetected, or hybrid, as a patchwork of materials; neither alternative is satisfactory. I venture to suggest that it is preferable to abandon the attempt (which must be futile) to obtain exaggerated overhang, and to substitute therefor vertical depth; by restudying the cornice in this sense, including a story or more in the depth of the cornice and its members, I believe a more satisfactory and a wholly legitimate result would be obtained. For this, too, we have an eminently successful classical example. The famous cornice of Vignola, with its deep consoles, will be readily recalled. Vignola, on a small scale, had the same problem to solve, and he solved it most judiciously by increasing his cornice in vertical depth without exaggerating the overhang. Modifications of this cornice are constantly used in modern French street architecture with happy effect; and, if a leaf were taken from the old Italian's book, though not without much study, there could doubtless be evolved a more suitable cornice for a "tall building" than by flying to metal and treating us to gilded gingerbread and tinsel two hundred and fifty feet above our heads.

It remains to add a word in regard to the effect of these "tall buildings" upon the appearance of the city as a whole. So long as they were few in number, they are said to have given New York a very ragged sky-line, unkempt, so to speak, and unpleasing. Now that they are fairly numerous, this seems no longer the case. The general raising of height—a result of modern city development by no means confined to New York—has necessarily tended to submerge many a worthy building that formerly rose tall and stately above its surroundings. An extreme case is Trinity Church, New York, a very sober and quiet study in perpendicular Gothic, the graceful spire of which formerly rose clear, a notable landmark of the city. It is now completely submerged and lost, rising, as it were, in slender effort, stifled in a sort of well. But this is painfully true of other cities, too. All visitors to Paris know how the Church of the Madeleine is now felt to be too low for its surroundings; how much it would gain by being raised above the houses that hem it in! In London also many of Wren's fine steeples are now almost equally engulfed and lost.

Nothing can excel the noble approach to New York; it is undoubtedly one of the finest harbors of the world. But the city itself is totally destitute of "heights." This lack the modern "tall buildings" certainly go some way effectively to make good, and I cannot but feel sure that in sky-line and general appearance from the harbor New York has gained from them.

That such would be the case elsewhere is not so certain; New York, from its original flatness, is perhaps a special case. It is comparatively easy to dwarf nature; and one of these tall buildings, judiciously planted so as to spoil a natural landmark, could achieve without difficulty the total and fatal ruination of a noble scene. It is dreadful, for instance, to imagine the Acropolis of Athens girt around with buildings like those in Broadway. Imagine Siena, her valleys enriched with "tall buildings" sprouting high above that fair Duomo which so nobly crowns her highest rock! Imagine Florence, nestling by the Arno under the heights of Fiesole and the distant girding Apennines—imagine Florence, now so fair, sleeping under Giotto's campanile and Brunelleschi's dome, were she to awake and find her Duomo dwarfed and thrown into the shade by a ring of New York tall buildings of the latest type, or of Chicago sky-scrapers!

Wren's noble dome, though somewhat dwarfed in height by its modern surroundings, nevertheless still floats in fair serenity, majestically crowning murky London. I cannot think that "tall buildings" are architecturally wanted in any of these cities; sufficient unto America be the "tall buildings" thereof.

THE *American Builder*, one of the noteworthy papers of its class, offers a list of one hundred of the leading periodicals of America free to new subscribers. Particulars, together with specimen copy, may be had by addressing the *American Builder*, 184 La Salle street, Chicago.

#### AN AMENDMENT TO "HEATING AND VENTILATION."

CHICAGO, November 1, 1897.

Editor *Inland Architect*:

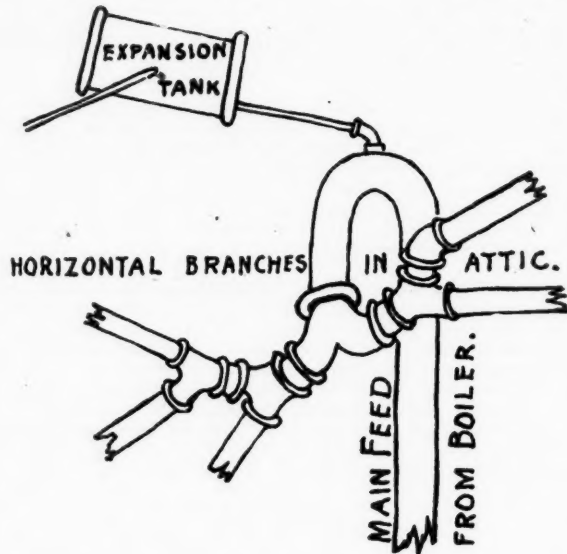
DEAR SIR,—Some three or four years ago you published in your columns "Heating and Ventilation of Residences," written by myself. Since then some changes and improvements have been made, which are hereby sent you, thinking they may be of interest to your readers.

The effort has been to do away with special fittings, etc., and to use only those which are kept in stock by dealers.

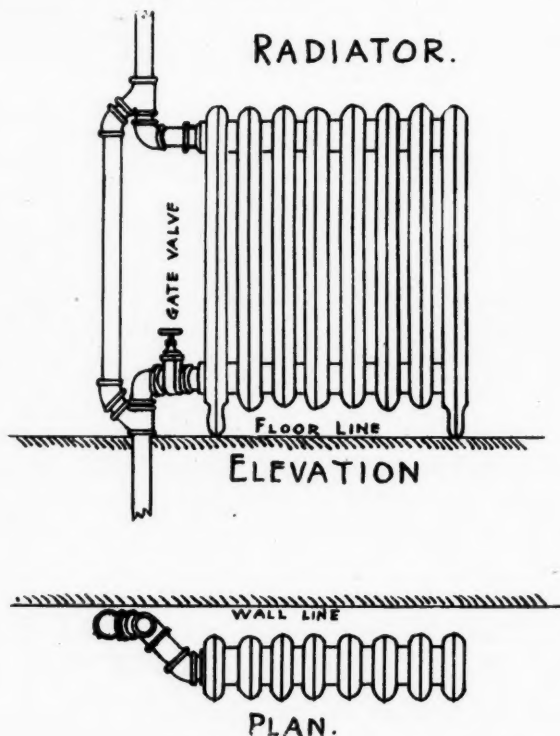
Very respectfully,

79 Dearborn street, Chicago.

JAMES R. WILLETT.



The above engraving exhibits a method by which the distributor is done away with, and is made up of pipe and fittings, which can be bought almost anywhere. Long sweep water fittings should be used throughout.



The above engraving of radiator, etc., exhibits a method of connecting up a radiator by which a deflecting valve is rendered unnecessary, and an ordinary straightway gate valve can be used. This method is the result of much experience and many trials, and has been found to be much the best.

Those who have the article referred to can secure the amendment by applying to the author, inclosing postage.

**THE ILLINOIS STATE ARCHITECTS' LICENSING BOARD.***Editor Inland Architect:* CHICAGO, November 3, 1897.

DEAR SIR,—Some days ago a young draftsman asked me what were the best courses of study to pursue in order to qualify himself for passing examination for a license to practice architecture. Presumably, there are a number of other young men who are ready to ask the same question.

Would it not be well for the Board of Examiners to indicate in outline the proper courses of study to pursue, or, at least, the outline of what they would require in the artistic, engineering, hygienic, etc., branches? It may be a help to many studious young men, who are now somewhat in the dark as to what they should do.

It is not only desirable to know the prescribed course of study but also to know what value would be placed upon practical experience. At first, doubtless, learning of the school, or book learning, should be somewhat lower than will be required in the future, and due weight given to practical experience.

Actual experience is superior to school learning of itself. Nevertheless, a reasonable amount of book learning should be required, but men of many years' experience in actual designing and building should not be thrown out because they may not be quite as well posted in the learning of the schools as would be desirable.

In any case, it would be well that the outline of the courses required should be given, so that the young men may not be left in doubt. It may take some time to outline such courses, but it should be done at as early a moment as is practicable, and there are none more capable of doing this than the board.

Yours, etc, JAMES R. WILLETT.

**THE NEW YORK PUBLIC LIBRARY COMPETITION.**

THE designs for the New York Public Library were all in the hands of George L. Rives, secretary of the trustees, at 6 P.M., November 1. Each of the twelve architects invited to compete sent in plans. Six of the competitors selected were from those who took part in the first competition, which was open to all architects; the others are prominent architects who were invited to send in designs. Each architect taking part in this second and last competition receives \$500, whether his plan is successful or not.

The six successful architects in the first competition were J. H. Freedlander, Haydel & Shepard, H. F. Hornbostel, associated with G. E. Wood and G. C. Palmer; Howard & Cauldwell, Peabody & Stearns, and W. Wheeler Smith, associated with Walker & Morris. Those invited to send in designs were Carrère & Hastings, Cyrus L. W. Eidlitz, Charles C. Haight, McKim, Mead & White, George B. Post and Whitney Warren.

The jury to select the best three designs consists of three practicing architects, chosen by the competitors, three members of the Board of Trustees, and Dr. John S. Billings, the director of the library. The architects on the committee are Walter Cook, of New York; Edgar V. Seeler, of Philadelphia, and Cass Gilbert, of St. Paul. The trustees are Alexander Maitland, John L. Cadwalader, and George L. Rives, the latter being secretary of the board.

The Board of Trustees of the library is the final arbiter on the successful design. The three drawings selected by the jury will be submitted to the board, which will choose the plan it considers the best, and submit it to the Board of Estimate and Apportionment. The architect of the successful design will have to consent to make such alterations as the trustees desire.

**OUR ILLUSTRATIONS.**

Detail of Façade, Church of the Holy Angels, Chicago. Eagan & Prinderville, architects.

Detail of Entrance, Botany Building; Detail of Entrance, Physiology Building, University of Chicago. Henry Ives Cobb, architect.

House for the St. Louis Club, St. Louis, Missouri. Accepted design by Freedlander & Dillon; competitive designs by Eames & Young, Shepley, Rutan & Coolidge, and M. P. McArdle. The building will be about 100 feet square, and as the lot, on Lindell boulevard, measures 150 by 250 feet, the problem included the designing of four unobstructed façades. This at once determined the character of the building as monumental in design, and at the same time reduced the difficulties of lighting and ventilation to the minimum. The style adopted is French Renaissance, with excellent attention to detail. The site is slightly elevated above the boulevard, from which a broad stone stairway leads up to a terrace extending along the entire front and east side. In the rear is a garden. The materials are to be light red brick and Indiana limestone, with slate roof. On the first floor will be the writing room, café, billiard and smoking rooms and offices. The second floor will contain a large dining room, with loggia for summer use, private dining rooms, card rooms, library and reading room, and

kitchens. On the third floor there will be a number of living rooms and parlors for residents of the club. The bowling alleys, gymnasium, locker and bicycle rooms, shower and tub baths, and a large plunge bath, besides barber shop, wine cellar and servants' hall, will be located in the basement. On the mezzanine floor, communicating with the main stairway, will be a large hall, suitable for balls, banquets and art exhibits—the largest room of its kind in the city. A unique feature of the new clubhouse is that it will contain an entirely separate suite of rooms for ladies, the approach being from the west side of the building. A reception room on the first floor will be connected by an independent staircase with an entirely isolated dining room and parlor on the second floor. If desired, these rooms may be put in communication with the large hall, which also can be separated from the rest of the building. Due attention has been given to the planning of broad and easy marble stairways for the interior, and an elevator service will be provided.

PHOTOGRAVURE PLATES.

Issued only with the Photogravure Edition.

Residence of Henry C. Sherrick, Cincinnati, Ohio. W. W. Franklin, architect.

Residence, Fred W. Job, Chicago. Pond & Pond, architects. Three plates are given: Exterior; View in Library; View in Dining Room.

Yerkes Observatory of University of Chicago; located at Lake Geneva, Wisconsin. Henry Ives Cobb, architect. The following full-page views are given: East View; West View; Entrance; Interior View.

**ASSOCIATION NOTES.**

ST. LOUIS CHAPTER A. I. A.

At the eighth annual meeting of the St. Louis Chapter of the American Institute of Architects, held on September 21, the following were elected to serve as officers for the ensuing year: President, Charles K. Ramsey; vice-president, Montrose P. McArdle; secretary, Alfred F. Rosenheim; treasurer, William B. Ittner.

CHICAGO ARCHITECTURAL CLUB.

At the last regular meeting of the Chicago Architectural Club, held at the clubrooms in the Art Institute, the following officers were elected: President, Edward G. Garden; first vice-president, Frank Kirkpatrick; second vice-president, William Eggebrecht; secretary, N. Max Dunning; treasurer, J. C. Llewellyn. Executive Committee, the officers and August C. Wilmanns and Frank Upman.

The classes, which have been a strong feature of clubwork, have started the year with a largely increased membership. The pen-and-ink rendering class is under the direction of Birch B. Long, and that in water color is directed by Harry D. Jenkins. The different "projects" of the year are under the leadership of Dwight G. Perkins, R. C. Spencer, George R. Dean, Edward G. Garden, Elmer Jensen, Frank Upman, W. B. Mundie and Myron H. Hunt.

The executive committee has announced that the time for the competition for "A Clubhouse for Architects," announced last month, has been extended to March 14, 1898.

On Monday evening, November 1, W. A. Otis gave an interesting address, illustrated by lantern slides, upon the development of architectural styles. It gave in a brief and direct manner a sketch of the growth of architectural styles.

**MOSAICS.**

IN the competition for a design for a corporate seal for the American Forestry Association, the time has been extended to January 15, 1898.

ARCHITECT NATHAN MYERS, of Newark, New Jersey, has removed into enlarged and commodious offices in the Metropolitan building, in that city.

On October 21, William H. Sayward, national secretary of the National Association of Builders, read a valuable paper upon the "Benefits of Organization" before the Lowell (Mass.) Builders' Association.

AMONG the awards made to American publications at the late International Exposition at Brussels, THE INLAND ARCHITECT was awarded a diploma for fine printing and a silver medal for its general excellence as a publication.

EXPANDED metal has come into such universal use from that of a basis for plastering to fencing for railroad rights of way, that it is not surprising, though it is notable, that it is now being used on some of the principal streets in Chicago as a basis for asphalt paving.

THE *Engineering Magazine* for November contains an unusual assortment of articles on practical subjects even for that progressive magazine. The leading article, by Hiram S. Maxim, on "The Effects of Trades Unionism Upon Skilled Mechanics," is a valuable description of the effects of unionism among machinists as observed by that great gunmaker, and should be read by every intelligent workman. It is probably the most valuable paper yet published on this subject, as the writer speaks entirely from personal experience and in full sympathy with mechanical advancement.

THE YALE "VULCAN" LOCKS.



THE most important contribution to the art of lockmaking within the past generation was unquestionably the invention by Linus Yale, Jr., of the Yale Lock (introduced a little prior to 1870), which has since revolutionized the practice of all American manufacturers of locks.

Another contribution to the art is here presented which, it is believed by the Yale & Towne Manufacturing Company, of Stamford, Connecticut, will prove to be in importance second only to

that of the Yale Lock. It consists in improvements which transfer the common mortise lock from the class of rougher products, produced in the foundry and finished chiefly by hand or by simple mechanical processes, to the higher plane of design and execution long occupied by such products as pistols, sewing machines and watches, and more recently by the bicycle, in which the crude processes of the foundry are replaced by the more accurate ones of the drop forge and power press, and the finishing of the material thus obtained is accomplished by the most modern

and perfect machine processes, whereby every piece is interchangeable and the final product is a highly finished and perfect piece of mechanism.

More than ten years ago this company took the first step in this direction when they introduced their No. 1620S Standard Lock.

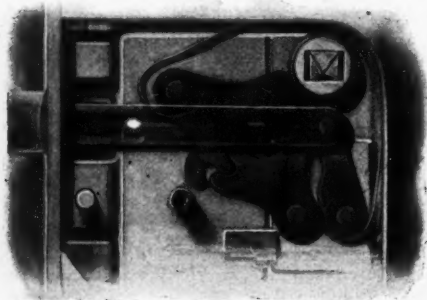


FIG. 1.

This was the earliest mortise lock with wrought steel case, but in other respects it followed the then prevailing practice, whereas the Vulcan locks present features of originality and improvement in almost every detail.

An examination of one of the locks constitutes the best, and in fact the only effective means of gauging the result which has been obtained, both in design and execution. All who have had this opportunity unite in expressing surprise that it has been found possible to accomplish such radical improvements in an article of such universal use, in which the practice of all manufacturers has been substantially identical, and which has remained without important change for more than a generation.

In substituting wrought for cast metal throughout they have followed the accepted practice of the best engineers in all constructive work of the larger kinds, and of the designers in the field of applied mechanics relating to the smaller and more complex forms of mechanism. By discarding former crude methods of production, and adopting those which have proved best in the finer machine industries, relating to the production of sewing machines, guns, watches, etc., they have largely eliminated hand labor, have secured perfect interchangeability of parts, and have simultaneously obtained a better product and a lower cost than have heretofore been possible.

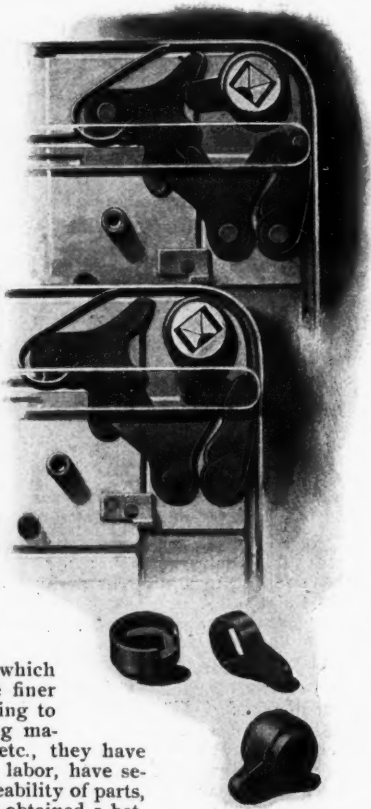


FIG. 2.

Among the many admirable and novel features of these locks, we will take space to notice, in this article, but a few. In the Cycloid Knob Action is embodied a great advance in lock mechanism. It discards the sliding action and substitutes pivotal motions and inter-gear'd levers, every piece being machine made from wrought metal. Fig. 1 shows the mechanism in its normal position. The hub, by which the rotary action of the knob is transmitted, has a single arm or cam projecting diagonally downward. Bearing against each side of this cam are two pivoted levers geared together at their other ends, so that motion of the cam in either direction produces the same effect upon the levers, causing the lower one to move backward, carrying with it the third lever, to which is pivoted the end of the latch-bolt.

In forcing back the latch-bolt, as in the closing of the door, this third lever alone is acted upon, and it will be noticed that the resistance offered is only that of a single spring, while when the bolt is operated by the knob, the heavier spring attached to upper lever is also brought into play, and the most perfect "easy spring" action is thus obtained. The latch-bolt is reversed by removing cap of lock. Fig. 2 shows the latch-bolt retracted by rotation of the knob in either direction, and shows also the construction of the hub or cam from two pieces of wrought metal, machine-made throughout.

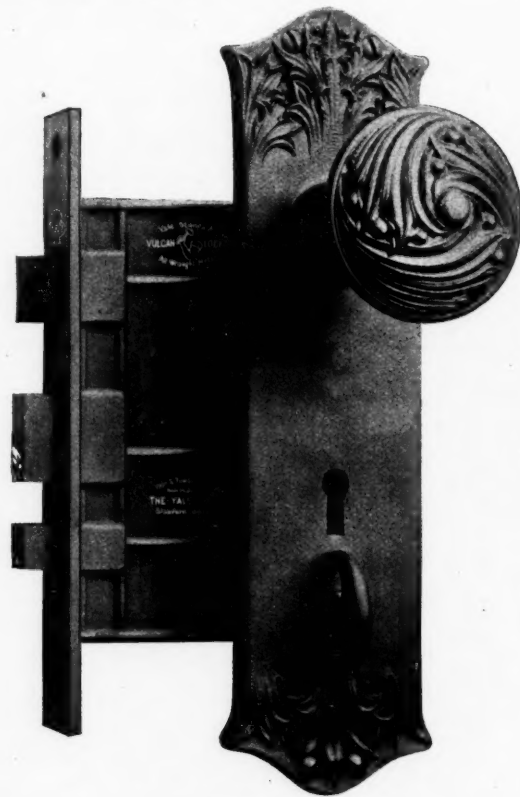


FIG. 3.—SET No. 281, CLUNY.

Fig. 3, Set No. 281, Cluny ornamentation, shown above, comprises 5-inch, 3-tumbled chamber door lock No. 2535 with one pair No. 56 knobs, one each No. 411 and No. 414 escutcheon, and one No. 5 thumb knob.

The Yale & Towne Manufacturing Company has issued a most artistic brochure fully explaining the construction and operation of these locks, and also a catalogue of 90 pages, illustrating and describing each lock in detail and showing it associated with a carefully chosen line of plain and ornamental trim. These may be had on application to the Company's Western office, 152-154 Wabash avenue, Chicago, or from any branch office of the company. These are located in New York, Boston, Philadelphia, Pittsburg and San Francisco.

The compensating hub feature consists in elongating the opening for spindle in the hub horizontally, so that shrinking or swelling of the wood of the door may occur without causing binding of the knob spindle. The absence of this provision in locks heretofore has been the chief cause of the binding of knobs and spindles and the resulting failure of locks to work properly. (See Fig. 4.)

The thirty-seven years in which the Yale lock has stood as a synonym for security will be perpetuated in other decades by the "Vulcan."

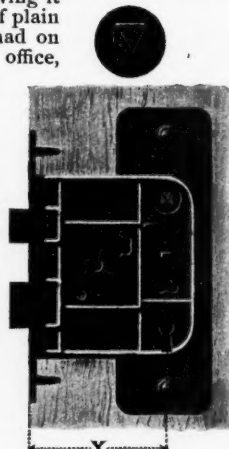


FIG. 4.



## NEW PUBLICATIONS.

HOW TO BUILD A HOME. By F. C. Moore. 12mo., 150 pp.; wood binding, \$1. New York: Doubleday & McClure Company.

Knowledge gained by costly experiment is the usual stock in trade of the successful builder. This book attempts to put such knowledge into crystallized form in the shape of practical information for intending home owners, for architects, contractors and superintendents. Having made a careful study of construction for more than a quarter of a century, Mr. Moore determined to give to the world the results of his experiments. This he has done in a very succinct and practical manner. Without wasting any words on the poetic beauties of home life, or the like, he has proceeded direct to a consideration of the most approved methods of home building. Not content with his own qualifications only for such a work, which certainly were ample in view of the book he has produced, he sought the advice also of numerous experts throughout the country, to whom he sent proof sheets of the work for criticism. The result was a consensus of opinion on all important points regarding the best methods and materials. Taken all in all, Mr. Moore's work is a most excellent guide through the intricate mazes of dwelling-house construction, which to so many are extremely puzzling.

## BUILDING OUTLOOK.

OFFICE OF THE INLAND ARCHITECT,  
CHICAGO, November, 10, 1897.

A forecast at this time is difficult. The country has had a few months of improving business, due largely, as generally attributed, to good crops and a good and remunerative foreign demand. The general business of the country is gradually approaching normal conditions. Prices in most lines manifest an upward tendency. Production in several lines has been stimulated. Confidence has improved, and there is today a strong feeling that with the approach of spring there will be a general opening up of trade and industrial channels. For this there are good reasons. The country has pocketed a nice pile out of wheat and other exports. The balance between production and consumption has been partially restored. Instead of curtailment we find enlargement; instead of restriction we note expansion in many, if not most, avenues of production and business. For a month or two the railroads have been giving better signs. Most of them have more freight to haul. Some of them are getting more money for their service. Agricultural interests are spending part of their crop money to reduce mortgages and increase equipment. Manufacturers have begun to round out shop and mill equipments, possibly too soon. Shop people have been pursuing a conservative course in buying. The credit system is being patched up. Banking methods are under the reorganizing scrutiny of a volunteer committee of experts, whose views will probably be made the basis of congressional action next winter. There is on all sides a preparatory movement, a marshaling of forces, a schooling of energies. In building we have had a fair year. Here and there the record of outlays has run ahead of last year; in many localities less building has been done. In many cities there is an abundance of "let" room awaiting improving industrial conditions. Prices of material are encouraging enterprise, but despite the volume of loanable funds money for building enterprises comes slowly. Lenders are of opinion there are enough houses, mills and factories for the present, and they believe that when more are needed they will be quickly forthcoming. There are many features of interest that might be included in a summary of this character, but the fundamental point is that there is a new motive power or force or agency at work, which, aided by good crops, is strengthening our national loins, and will put vigor into our step and clear vision into our eyes and force to our arms to strike heavy blows on the anvil of opportunity for success during the coming year. We have no cause to regret, and much to rejoice about. The country at large has not yet had its invigorating tonic, but recuperation takes time. The good process is at work. For five years things have been wrong. It has been out of the power of energy, enterprise, experience and devotion to business to make things go as they should. The long lane has been turned, and there is a brighter vista ahead.

## SYNOPSIS OF BUILDING NEWS.

Architects are invited to furnish for publication in this department monthly or occasional reports of their new work before the letting of contracts. Reports of buildings costing less than \$5,000 are not published.

**Chicago, Ill.**—Architect Arthur Heun: For Mrs. Charles Burrall McGenis, a two-story, basement and attic residence, 40 by 80 feet in size; to be erected at Lake Forest; the basement and first story will be of brick and the rest of frame; have fine hardwood interior finish, specially designed mantels, sideboards, consoles and hall trees, the best of open nickel-plated plumbing, gas and electric fixtures, electric light, hot-water heating, electric bells and speaking tubes, laundry fixtures, etc.

Architect W. J. Van Keuren: For James L. Fargo, a two-story manufacturing building, 56 by 150 feet in size; to be erected at 53 and 55 Clinton street; it will be of pressed brick and stone front, mill construction, have steam heating, electric light, elevators, etc. For B. F. Dare, a two-story flat building, 25 by 65 feet in size; to be erected at 483 Warren avenue; to be of pressed brick front with buff Bedford stone trimmings, have oak finish, mantels, sideboards, steam heating, gas fixtures, electric bells, etc.

Architects Chubb & Mozier: For J. R. Livesby, a two-story double flat building, 50 by 65 feet in size; to be erected on Ashland avenue; to be of buff Bedford stone front, have interior finished in oak and Georgia pine, all open nickel-plated plumbing, gas and electric fixtures, steam heating, mantels, sideboards, laundry fixtures and driers, electric wiring, gas ranges and fireplaces, etc. For A. J. Smith, three two-story frame houses, 22 by 40 feet each; to be erected at West Fullman; to have brick basements, oak and pine interior finish, mantels, furnaces, gas fixtures, etc.

Architect Sidney Smith: For William Mack, a four-story and basement flat building, 25 by 70 feet in size; to be erected at 240 Hudson avenue; the front will be of pressed brick with buff Bedford stone trimmings, interior to be finished in oak, have mantels, sideboards, steam heating, gas fixtures, electric light, bells, etc. For J. H. Wallace, a four-story apartment house, 50 by 85 feet in size; to be erected at Wellington street; it will be of stone basement and

pressed brick and stone above, have oak and Georgia pine interior finish, gas and electric fixtures, steam heating, specially designed mantels, consoles, hall trees, electric light, bells, speaking tubes, gas ranges, etc.

Architect W. H. Drake: For Horace F. Waite, a five-story factory building, 40 by 180 feet in size; to be erected at the corner of Jefferson and Van Buren streets; it will have a pressed brick and stone front, mill construction, have the necessary plumbing, electric light, steam heating, elevators, cement basement, engines, boilers, dynamos, pumps, etc.

Architect L. J. Ostling: For A. J. Alund, a three-story and basement flat building, 23 by 92 feet in size; to be erected at 850 Bosworth avenue; it will have a buff Bedford stone front, oak interior finish, mantels, sideboards, gas and electric fixtures, furnaces, gas ranges and fireplaces, electric light, etc.

Architects Griefenhagen & Kingsley: For the Fifth Presbyterian Church, at Leland avenue, Ravenswood, a two-story, basement and attic parsonage, 25 by 50 feet in size; to be of buff Bedford stone front, have oak interior finish, mantels, sideboards, hall trees, consoles, gas and electric fixtures, furnace, electric light, gas ranges, etc. For Mrs. Dora Timmerman, a three-story apartment building, 60 by 125 feet in size; to be erected at the corner of Englewood avenue and Wright street; it will be of pressed brick and stone front, have hardwood interior finish, mantels, hall trees, consoles, sideboards, gas and electric fixtures, gas ranges and fireplaces, steam heating, electric light, electric bells and speaking tubes, etc.

Architect J. A. Miller: For H. F. Nuelsen, three three-story flat buildings, two 25 by 68 feet and one 25 by 80 feet in size; to be erected at Halsted street near Evanston avenue; they will have buff Bedford stone fronts, oak interior finish, mantels, sideboards, steam heating, electric light, gas ranges, etc.

Architects Waide & Cranford: Making plans for a two-story, basement and attic residence, 36 by 52 feet in size; to be erected at Ottawa, Kansas; to be of stone, first story, and frame above, have fine hardwood finish, mantels, sideboards, consoles, electric light, heating, etc. Same architects are making drawings for a library building, 60 by 75 feet in size; to be erected at Brooklyn, New York, for the Kings County Medical Society; it will be of pressed brick with terra cotta trimmings, have hardwood finish, modern sanitary conveniences, steam heating, electric light, etc.

Architect W. F. Pagels: For J. E. Nelson, a two-story, basement and attic frame residence, 36 by 50 feet in size; to be erected at Hermitage avenue, Ravenswood; to have a stone basement, oak finish, mantels, sideboards, consoles, hall trees, gas and electric fixtures, nickel-plated plumbing, hot-water heating, gas ranges and fireplaces, electric bells. For M. Bienville, a two-story, store and flat building, 35 by 68 feet in size; to be erected at Desplaines; to be of pressed brick and stone front, have hardwood finish, mantels, sideboards, the modern plumbing, gas and electric fixtures, steam heating, laundry fixtures, wiring, etc. Also making plans for a four-story, store, flat and hall building, 66 by 100 feet in size; to be erected on North Halsted street; to have a front of buff Bedford stone and pressed brick, all the modern conveniences, steam heating, hardwood finish, electric light, etc.

Architect J. T. Fortin: For Dr. W. Vanpell, a two-story, store and flat building, to be erected at the corner of Colorado and Tower avenues; to have a buff Bedford stone front, oak finish, mantels, sideboards, furnaces, modern open plumbing, gas and electric fixtures. For Cyrus Grimm, a two-story, basement and attic residence; to be built at West Forty-fifth street; to be of pressed brick and stone front, have hardwood finish, mantels, sideboards, consoles, hall trees, gas and electric fixtures, hot-water heating, electric light, gas ranges, etc. For Rev. A. L. Bergeron, a two-story and basement rear addition at 15 Sibley street; to be of common brick and stone, have modern plumbing, gas fixtures, hot-water heating.

Architect Arthur Peabody: For George F. Cole, a two-story, basement and attic frame residence, at Highland Park; to have a brick basement, hardwood interior finish, mantels, sideboards, consoles, modern open plumbing, hot-water heating, electric light, gas ranges, etc.

Architects Hessenmueller & Meldahl: Making plans for a three-story flat building, 40 by 70 feet in size; to be erected at Sixty-fourth street near Drexel avenue; it will have a buff Bedford stone front, hardwood finish, mantels, sideboards, consoles, steam heating, nickel plated plumbing, gas and electric fixtures, gas ranges and fireplaces, marble and tile work, electric light, cement basement, electric bells and speaking tubes.

Architect Samuel K. Colton: For Collins & Morris, a four-story flat building, to cost \$50,000; to be erected at Thirty-ninth street and Ellis avenue; it will be of buff Bedford stone front, have hardwood finish, mantels, sideboards, gas and electric fixtures, electric light, etc. For E. C. De Witt & Co., a five-story building 45 by 110 feet in size, at La Salle avenue near Chicago avenue; to be of pressed brick and stone front, etc.

Architect W. H. Pruyn: For Judge Kirk Hawes, two three-story residences, to cost \$20,000; to be erected at Madison Park near Fiftyth street; they will have pressed brick and stone fronts, hardwood interior finish, specially designed mantels, sideboards and consoles, all open nickel-plated plumbing, gas and electric fixtures, gas ranges and fireplaces, electric light, steam heating, electric bells and speaking tubes.

Architect Henry J. Schlacks: Made plans for the St. Anthony Hospital, to be erected at the corner of Nineteenth street and Douglas boulevard; it will be a handsome four-story and basement building, in modern German Renaissance; size 50 by 115 feet, of buff pressed brick, trimmed with buff Bedford stone and Spanish tile roof; the building will be strictly fireproof and be fitted up with the latest system of ventilating, heating, elevator service, etc.

Architects Clay & Luton: For John Dupce, remodeling residence at Oconomowoc Island, Wisconsin; will put in new plumbing, hardwood finish, mantels, sideboards, consoles, electric light, heating, etc.; when completed this will be a very handsome Colonial house with a frontage of 126 feet. Same architects are making plans for refitting up corner store in the Palmer House for S. F. Wilson & Co.; will put in elaborate mosaic and marble work, steam heating, electric light, cabinet work, plumbing, etc. Also making plans for two-story, basement and attic country residence for William A. Giles, to be erected at North Michigan Island. Also making alterations in Harbor Point (Mich.) residence for Charles A. Chapin; will fit up interior with elaborate hardwood finish, specially designed mantels, sideboards, consoles, hall trees, etc.

Architects Church & Jobson: For R. M. Jaffray, a three-story flat building, 27 by 68 feet, to be built at 1477 Wellington avenue; to be of buff Bedford stone front, have oak interior finish, furnaces, mantels, sideboards, gas and electric fixtures, laundry fixtures, electric bells. For Miss R. E. Gilbert, a two-story, basement and attic frame residence, 28 by 54 feet in size, at North Edgewater; stone basement, oak finish, specially designed mantels, sideboards and consoles, furnace, electric lights, electric bells, speaking tubes, cement work, etc. Architect Paul Gerhardt: For Henry Steinhaus, a three-story and basement apartment building, 110 feet front; to be erected at 1070 to 1078 Milwaukee avenue; the front will be of buff Bedford stone, have interior finished in oak, modern plumbing, steam heating, gas fixtures, mantels, etc.

Architect H. G. Wright: For Daniel B. Bathrick, a three-story and basement flat building, 42 by 70 feet in size; to be erected at 550 to 552 Greenleaf avenue, Rogers Park; to be of pressed brick and stone front, have modern open plumbing, gas and electric fixtures, oak finish, gas ranges and fireplaces, steam heating, electric light, etc.

Architect H. F. Swanson: For H. N. Stoltenberg, a two-story, basement and attic residence, 25 by 45 feet in size; to be built at Humboldt boulevard; it will be of buff Bedford stone front, quartered oak finish, mantels, hall trees, sideboards and consoles, have gas and electric fixtures, hot-water heating, electric light, etc.

Architect M. E. Bell: Made plans for the Watertown (Ill.) Insane Asylum; it will be two-story, basement and attic, 102 by 270 feet in size; to be of rock-faced and cut stone exterior, and courtyard to be of pressed brick; it will be of steel construction and fireproof, have steam heating and modern ventilating apparatus, the best of open plumbing, electric light, marble and cement work, lifts and elevators, electric bells, etc.

Architects Patton & Fisher: For Curtis J. Judd, a handsome Colonial residence, 50 by 100 feet in size; to be erected at Monterey, Massachusetts, on an estate situated among the Berkshire hills; it will be of field boulders with siding of shingles, have fine hardwood interior finish, specially designed mantels, sideboards, consoles, etc.; there will also be a barn and boathouse; the whole to cost \$15,000.

Architect J. L. Silsbee: Made drawings for the Calumet Electric Company's barn, to be erected at Drexel avenue and Ninety-third street; it will be 125 by 376 feet in size; of pressed brick on two sides; have truss of steel, etc.

Architect Julius Speyer: For Henry Whitchurch, a two-story flat building, 25 by 70 feet in size; to be erected at Millard avenue, between Twelfth and Thirteenth streets; to be of buff Bedford stone front, have oak finish, gas fixtures, furnaces, mantels and sideboards.

Architect James Burns: For Charles Clarkson, a three-story store and flat building, 45 by 80 feet in size; to be erected at 1627 to 1629 Ogden avenue; it will have two fronts of pressed brick and stone, oak finish, mantels, sideboards, steam heating, gas and electric fixtures, etc.

Architect Albert S. Hecht: For William S. Goeding, a four-story apartment house, 50 by 74 feet in size; to be erected at Aldine avenue; it will be of buff Bedford stone front, have hardwood finish, gas and electric fixtures, mantels, sideboards, open nickel-plated plumbing, steam heating, etc.

Architect Frederick Ahlschlager: For N. G. Harris, a two-story flat building, 22 by 56 feet in size; to be built at Kenmore avenue, near Graceland avenue; to have buff Bedford stone front, hardwood finish, mantels, gas fixtures, furnaces, electric light, etc. For H. Krueger, a three-story flat building, 25 by 61 feet in size; to be erected at corner of Greenwood avenue and Rockwell street; to have a cut stone front, hardwood finish, gas and electric fixtures, mantels, steam heating, electric light, sideboards, etc.

Architect Henry Sierks: For T. W. Saunders, a four-story flat building, 50 by 75 feet in size; to be erected at 3121 Indiana avenue; to be of pressed brick and stone front, have oak interior finish, mantels, sideboards, etc.

Architect Louis Martens: For P. A. George, a two-story flat building, 50 by 115 feet in size; to be erected at Ingleside avenue, south of Fifty-sixth street; to be of pressed brick, stone and terra cotta front, have hardwood finish, gas and electric fixtures, steam heating, etc.

**Detroit, Mich.**—Architect F. J. Grenier: For Albert S. Bierly, apartment house of eighteen suites, with two entire fronts of Ionia sandstone; cost, \$36,000.

Architects Mason & Rice: For Orla B. Taylor, two-story brick residence, with trimmings of cut stone, and slate roof; cost, \$7,000.

Architect Edward C. Leyer: For John J. Robertson, two-story frame double residence; cost, \$5,000. For Nathan T. Bradner, two and one-half-story brick veneered double residence; cost, \$5,000.

Architects Nettleton, Kahn & Trowbridge: For George Leady, brick residence, 48 by 50 feet in size; cost, \$5,000. For Mrs. Hurley, two-story frame double residence; cost, \$5,000.

Architect Harry C. Stevens: For P. J. Tucker, three-story combined stable and storage building; cost, \$5,000.

Architects Malcomson & Higginbotham: For Collins B. Hubbard, block of ten brick residences; 60 by 174 feet in size; cost, \$25,000.

Architect R. E. Raseman: For American Brush Company, two-story brick manufactory, 60 by 125 feet in size; cost, \$6,000.

Architect A. M. Varney: For Rowen & Rathbone, two-story brick double residence; cost, \$5,000.

Architect George W. Myers: For Robert J. Hutton, two story apartment building of yellow pressed brick, cut stone trimmings and galvanized iron cornice; interior of hardwood; 32 by 125 feet in size; cost, \$10,000.

Architects John Scott & Co.: For D. M. Ireland, two-story brick residence; cost, \$8,000.

Architects A. C. Varney & Co.: For O. H. Elliott, two-story brick and veneered residence; cost, \$5,000.

**Denver, Col.**—Architects Fleming Brothers: Two-story dwelling, brick; 26 by 48 feet in size; cost, \$5,000. Two-story dwelling, brick; 30 by 50 feet in size; cost, \$8,000.

Architect C. K. Phillips: Two-story dwelling, brick; 26 by 38 feet in size; cost, \$5,000.

Architect O. L. Smith: Two-story dwelling, brick; 28 by 50 feet in size; cost, \$8,000.

Architect Walter L. Rice: For Ladies' Relief Society, two-story "Home," brick; 94 by 120 feet in size; cost, \$12,000.

Architect John F. Morell: Two-story dwelling, brick; 34 by 50 feet in size; cost, \$7,000.

Architect William Hennessey: Five two-story dwellings, brick; each 23 by 34 feet in size; cost, \$22,500. Sixty-six permits issued; cost, \$117,700.



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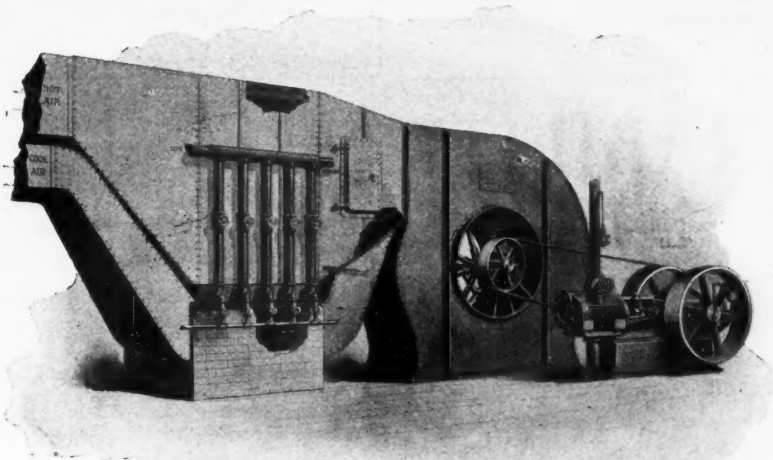
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# THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXX.

ADVERTISERS' TRADE SUPPLEMENT.

No. 4

## Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

## REQUESTS FOR CATALOGUES AND SAMPLES.

Those wishing catalogues and samples sent them by dealers in general may have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give THE INLAND ARCHITECT due credit for business benefits that result.

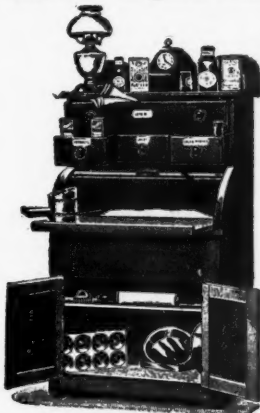
TURGEON & LAFRENIERE, Architects, Room 10, No. 55 St. Francis Xavier Street, Montreal, Canada.

D. P. CLARK, of Bay City, and A. E. MUNGER, of Saginaw, Michigan, have formed a copartnership, the style of the firm name and address being Clark & Munger, Architects, Suite 414 Phoenix Block, Bay City, Michigan. No catalogues except most recent inventions and improvements are needed, as each member of the firm had an ample supply.

JOHN H. GRAINGER, Chief Architect, Perth, West Australia.

## A KITCHEN CABINET.

The attention of architects and builders generally has lately been called to a device known as the Queen Kitchen Cabinet. It



has proved itself to be one of the most convenient articles of kitchen furniture, containing as it does drawers and shelves for holding all cooking accessories, from flour to spices. A broad molding board is so arranged that it can be drawn out for use and a rolling cover concealing it when not in use. It is now being adapted to the planning of kitchens in flats and residences, where the finish can be made to perfectly harmonize with the surrounding woodwork; and as its mechanism is such that it is incomparable in point of convenience and cleanliness, besides its use lessening the cost of storage closets by at least one-half, architects find it an attractive innovation when presenting the detail of plans to an owner, particularly if the person interested be a lady. The offices of the company are located at 214 Monroe street, Chicago.

## A RUST-PREVENTING PAINT.

One of the most costly lessons of experience is that which has been learned during the last decade by users of exposed ironwork, namely, that ordinary painting is not a sure preventive of rust. Authorities are now agreed that, no matter how many coats of common paint are put on the surface of metal, rust will eat through from underneath. Mr. Charles E. Koons, in a communication to the *Railroad Car Journal*, says that the starting point of this internal rust is in the shell or scaly particles, or what is more properly called the shale of the natural iron when it is formed by the cast before any paint is put on it. This rough surface gathers oxygen as soon as the casting is cool, and when it is permeated with the elements there is only one way to get rid of it, and that is by cutting it down

smooth and painting it immediately afterward. Rust, when it once gets a start, feeds upon shale, and will form a coating of itself in time, even when it is coated over and protected on the outside with numerous coats of paint. The same is true of the inner and outer surfaces of piping that has lain under ground for years. The destroyer has gone on eating until coatings of rust one-fourth of an inch thick were formed. Some writers have called this protection of itself. Still, it will keep feeding on until nothing is left of either shale or paint. Mr. Koons concludes that the first requisite is to prepare the surface of the ironwork to be painted by making it perfectly smooth; then a covering must be applied which shall be preservative as well as protective—to so preserve the raw iron that the germ of rust will not be able to start its nefarious work, as well as to protect the outside so that the elements cannot come through. This is the goal to which the efforts of paint manufacturers have been directed of late years, and it is gratifying to know that in one instance, at least, they have been successful.

Carburet Black is the designation by which the Wadsworth-Howland Company's preservative for exposed iron or wood work is known. It is the result of years of experiment and experience, and has proved itself to be practically indestructible when applied on wood or metal. It will resist the deteriorating effects of moisture and climatic changes, the fumes of sulphur, gas, acid, water, brine, alkalis or chemicals. It is noncorrosive and will preserve against rust or corrosion of iron or other metal work under the severest tests. It can be used with most satisfactory results on water and steam pipes and heaters, water and gas pipes laid under ground, structural iron used in buildings and bridges, smoke stacks, metal roofs, gutters, fire escapes, gas holders, etc. For railroad bridges, metal framing of cars, trucks, etc., also for shingle roofs and wooden car frames, it is unsurpassed. Carburet Black is anti-rust and acid proof, and will fully protect railroad bridges against effects of dripping brine from refrigerator cars, sulphurous acid from wet coal, and sulphur fumes from burning coal in locomotives. It dries firm, but elastic, will not peel or chip, is not affected by expansion or contraction of metal or disturbed by vibration. Heat will not affect its durability.

On the score of economy also, Carburet Black may be recommended most highly because of its remarkable covering capacity and great durability. The manufacturers claim that this preparation will cover from two to three times more surface to the gallon than the ordinary protective coverings for exposed metal work, and that it will retain its protective qualities much longer. They estimate its value (covering capacity and durability considered), as compared with the usual preservatives, at a ratio of 5 to 1. Their suggestions in regard to the preparation and protection of exposed metal work are worthy of careful consideration.

Exterior decoration by means of stains has become so common that the demand is now fully as great for a complete color scheme in this class of preservatives as in paint. With a view to fully satisfying all wants in this direction, the Wadsworth-Howland Company make their cottage shingle stains in no less than twenty shades, including warm gray, warm olive (dark), colonial yellow, silver gray, light russet, warm olive (light), oriental green, deep brown, golden brown, Indian red, tuscan maroon, yellow brown, moss green, medium orange, bronze green, red brown, deep red, Turkey red, Nile green and Italian red. This variety of tints enables the architect to bring to his aid such an effective distribution of light and shade as will form a beautiful picture, in harmonious contrast with the perfect blending of color in the surrounding landscape. Thus, a simple cottage

may be made an object of real artistic beauty. The Wadsworth-Howland Company's stains are made of the best of materials and are thoroughly economical and reliable. The company furnishes samples and complete information regarding these and their other goods on application to the home office, 127 to 131 West Harrison street, Chicago.

## TRADE NOTES.

I. P. FRINK, 551 Pearl street, New York, has recently installed his patented system of reflectors in the art galleries of the following prominent department stores: Abraham & Straus, Brooklyn, New York; Bloomingdale Brothers, R. H. Macy & Co., New York; Hahne & Co., Newark, New Jersey.

IN reference to the recent award of contract for roofing tin for the White House at Washington, D. C., we are informed that for the particular bids in question, under inquiry dated April 1, 1897, no samples of tin were desired or called for at that time, and furthermore, that the order was secured on the ground of lowest price for the first quality of the successful manufacturer.

THE Powers Regulator Company is installing their system of automatic temperature controlling apparatus in the Bradley Polytechnic Institute at Peoria, Illinois. They have recently been awarded, by the United States Government, contract for automatic temperature controlling apparatus to be placed in the United States Post Office and Customhouse Building at Omaha, Nebraska.

MACKOLITE is a German invention for fireproofing purposes. On a frame-work of bamboo a whitish composition of fireproof materials is spread in thin layers, and thus a material is obtained which is at once of great strength, lightness and fire-resisting qualities. In thin form it is used for furring, ceiling, etc. In greater thickness it can be used where considerable strength is required, as for heavy partitions, etc. In this form it is three inches or more thick, with lath imbedded at convenient distances. Where thickness would create weight this is obviated by the insertion of "cores," which lighten but do not weaken the structure. Partitions made of mackolite are strong and rigid and ready for the plasterer without the use of lath. Woodwork also can be nailed directly to the mackolite wall without difficulty or danger of pulling loose. As mackolite weighs only about one-third as much as ordinary fireproofing it is easy to handle and can be "built in" quickly. Iron plans may be made lighter, plastering costs less than where lathing is necessary, fireproofing is rendered cheaper, and no time is lost in waiting for the building to dry. In a large building these considerations become of the highest importance. As a fireproofing material mackolite cannot be surpassed. Its characteristic feature is that in case of fire no matter how hot it becomes from long exposure to the hottest blaze, water can be thrown on its heated surface without any danger of cracking or injuring it. For partitions, floors or even for outer walls it is said to be entirely satisfactory. It is of German origin and in Germany all government buildings are required to be fireproofed with mackolite. Some of the largest buildings in this country have been fireproofed with this material. Among them are the Monadnock, the Schiller, the Venetian and the Marquette buildings, the Masonic Temple, the Criminal Court building, the Chicago public schools, and the Alexian Brothers Hospital; Schiller Flats, Jenny & Mundie, architects; residence of Mr. Joseph Theurer, R. E. Schmidt, architect—all in Chicago, and the Manual Training School and Indiana Trust building at Indianapolis, Indiana. The Mackolite Fireproofing Company, Schiller building, Chicago, have the manufacture and sale of this material in this country.



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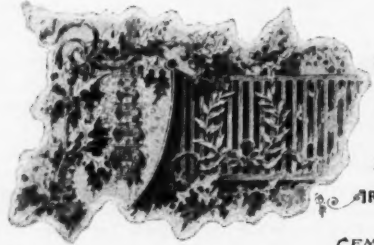
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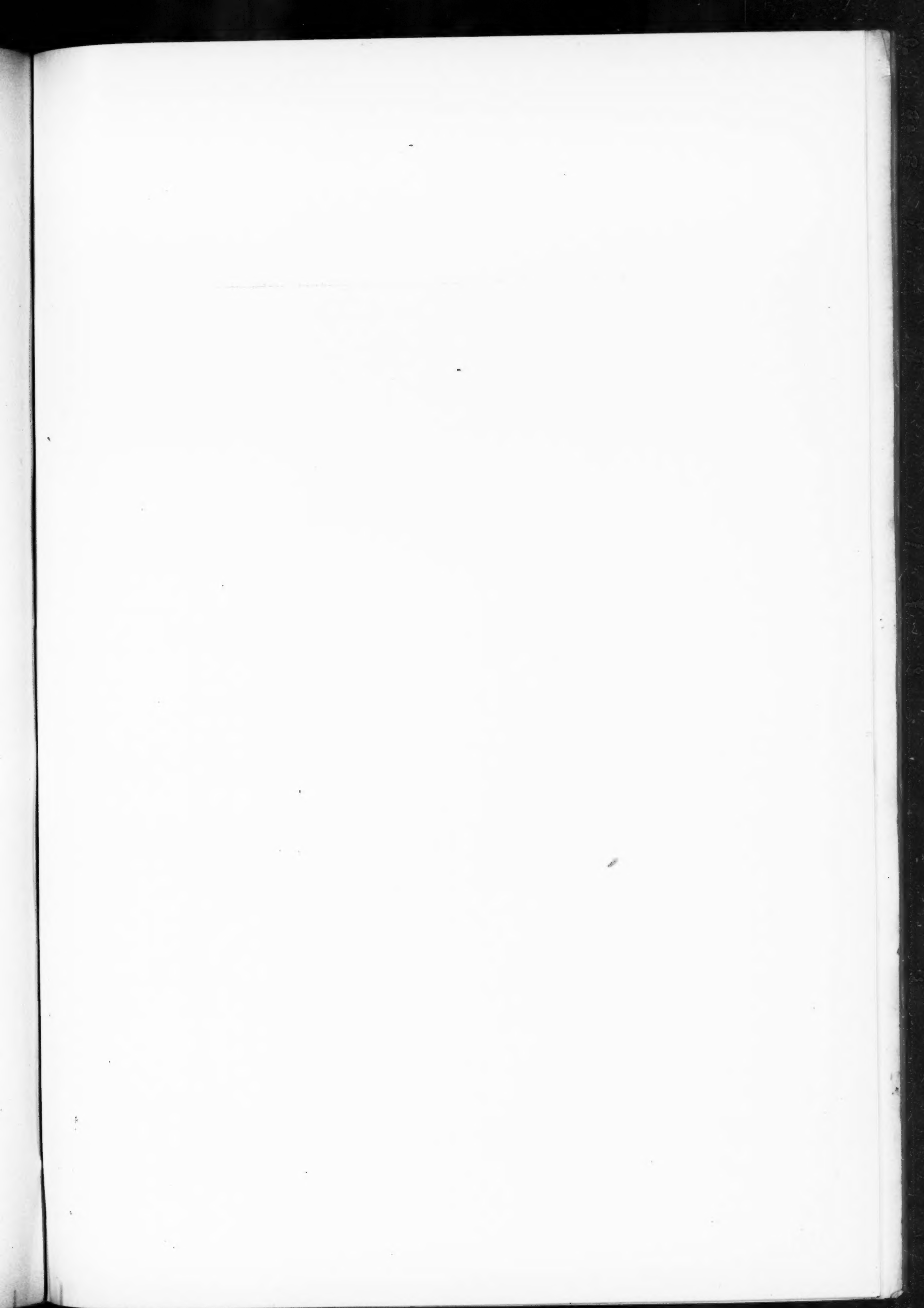
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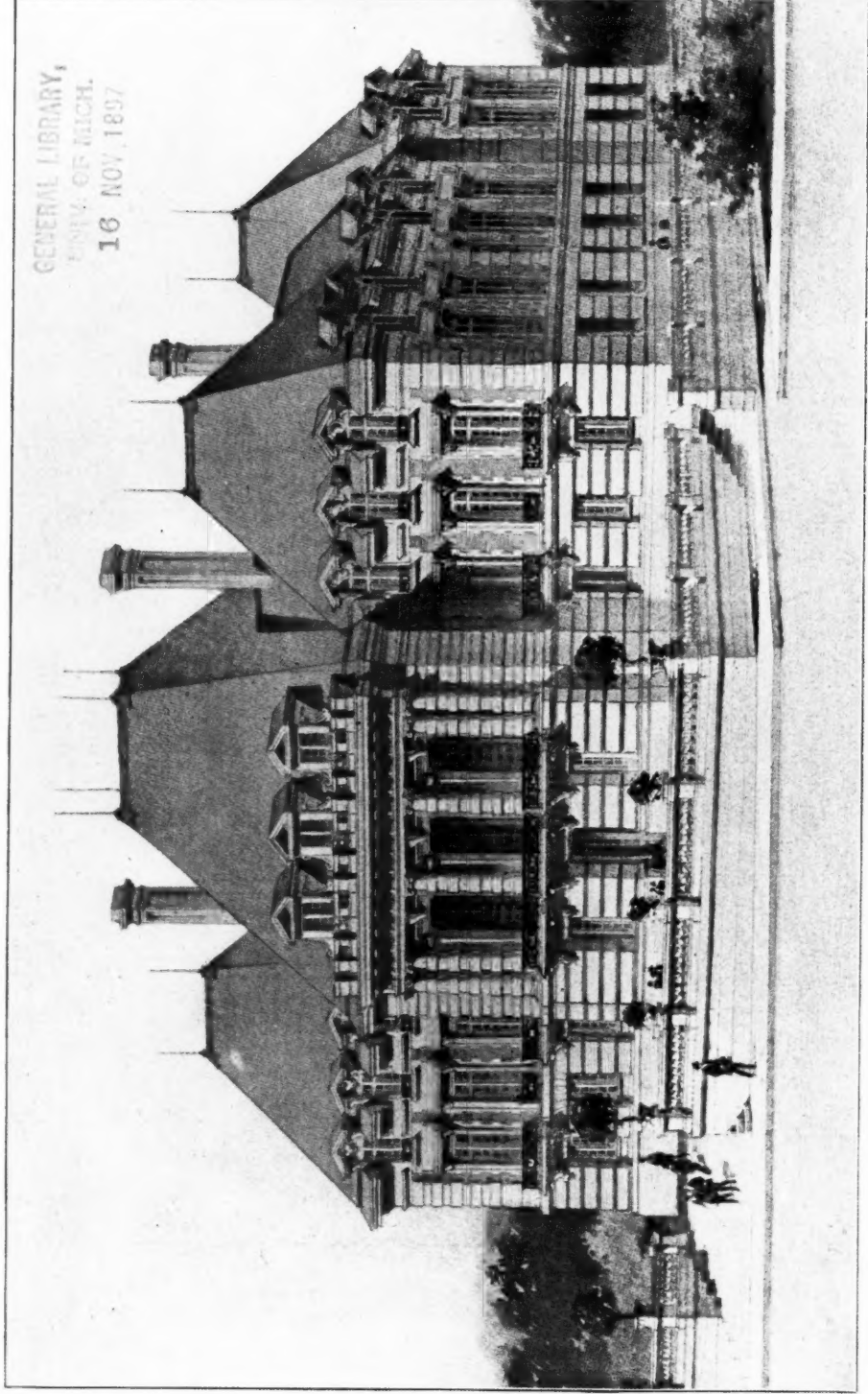
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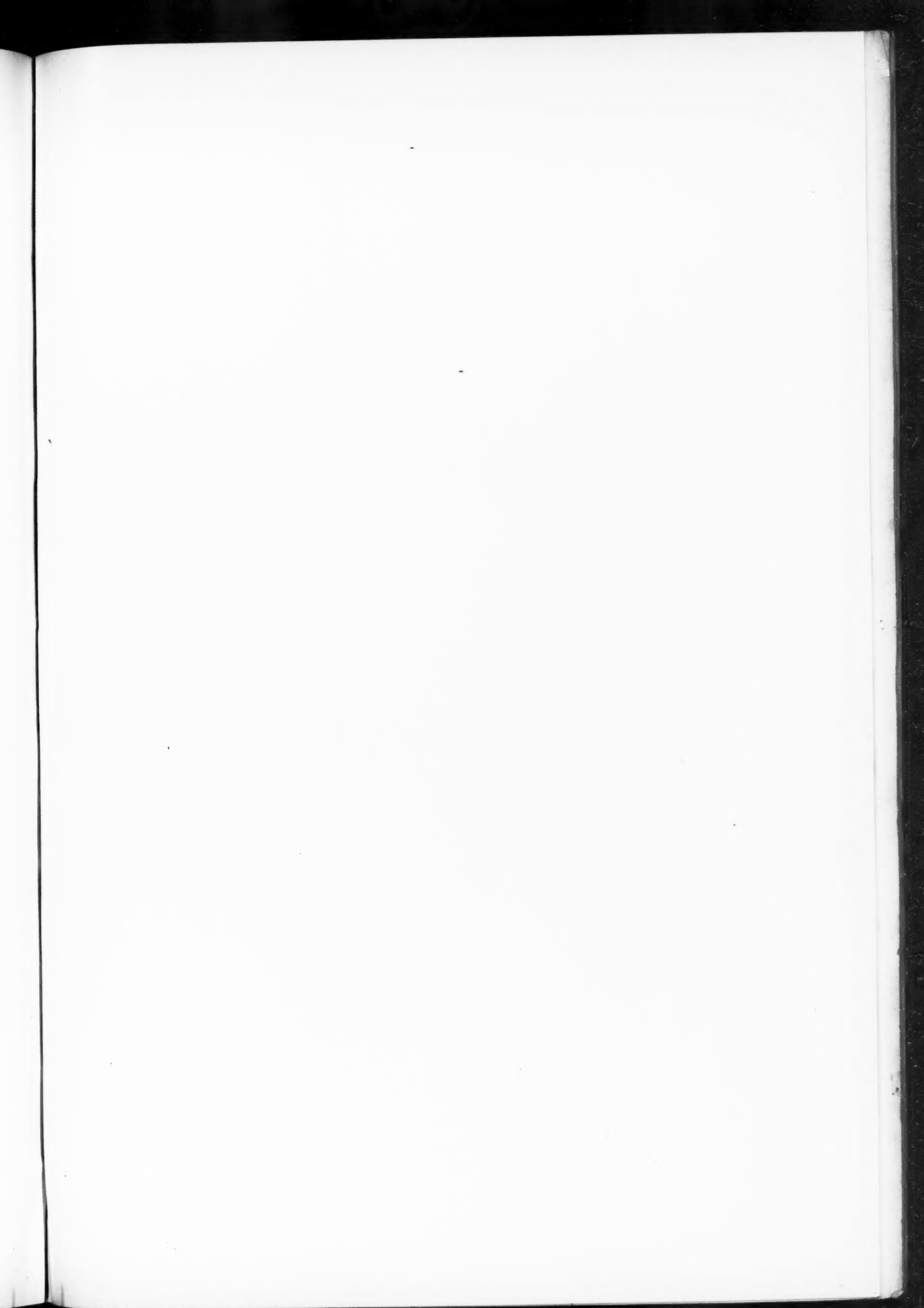


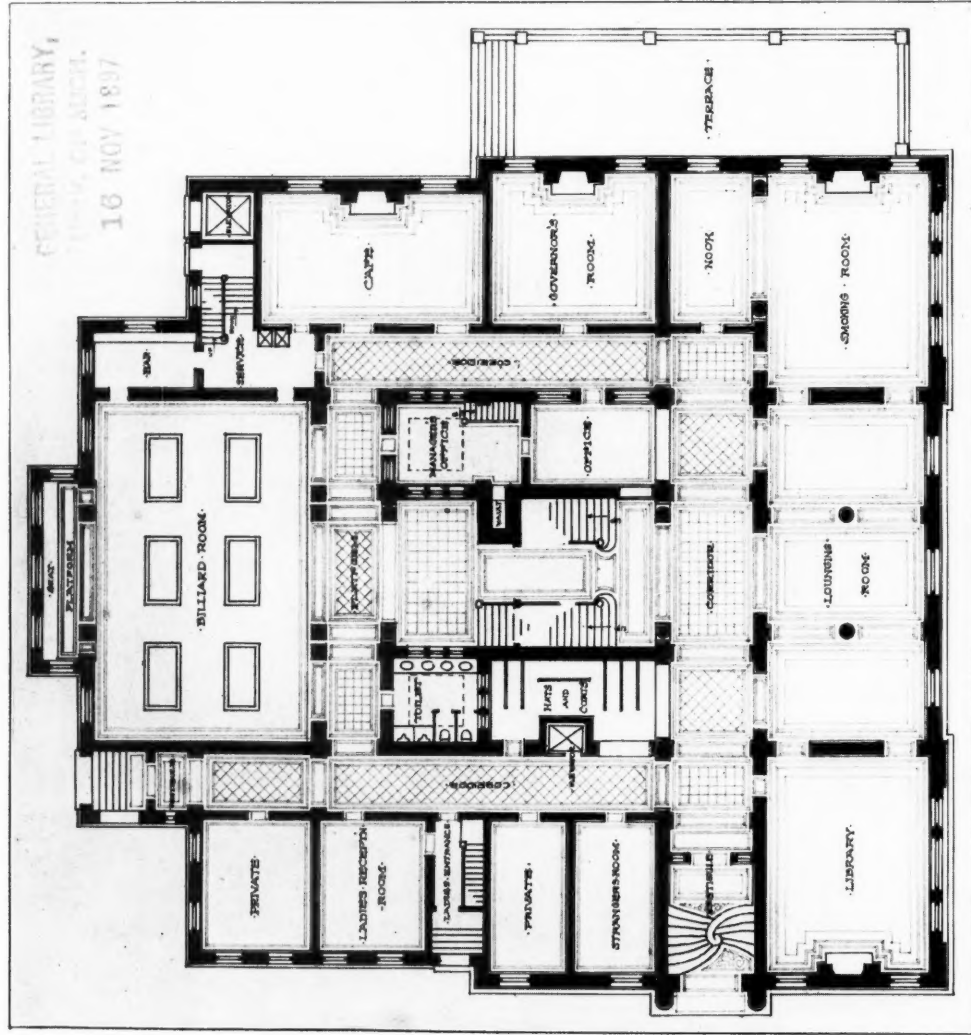
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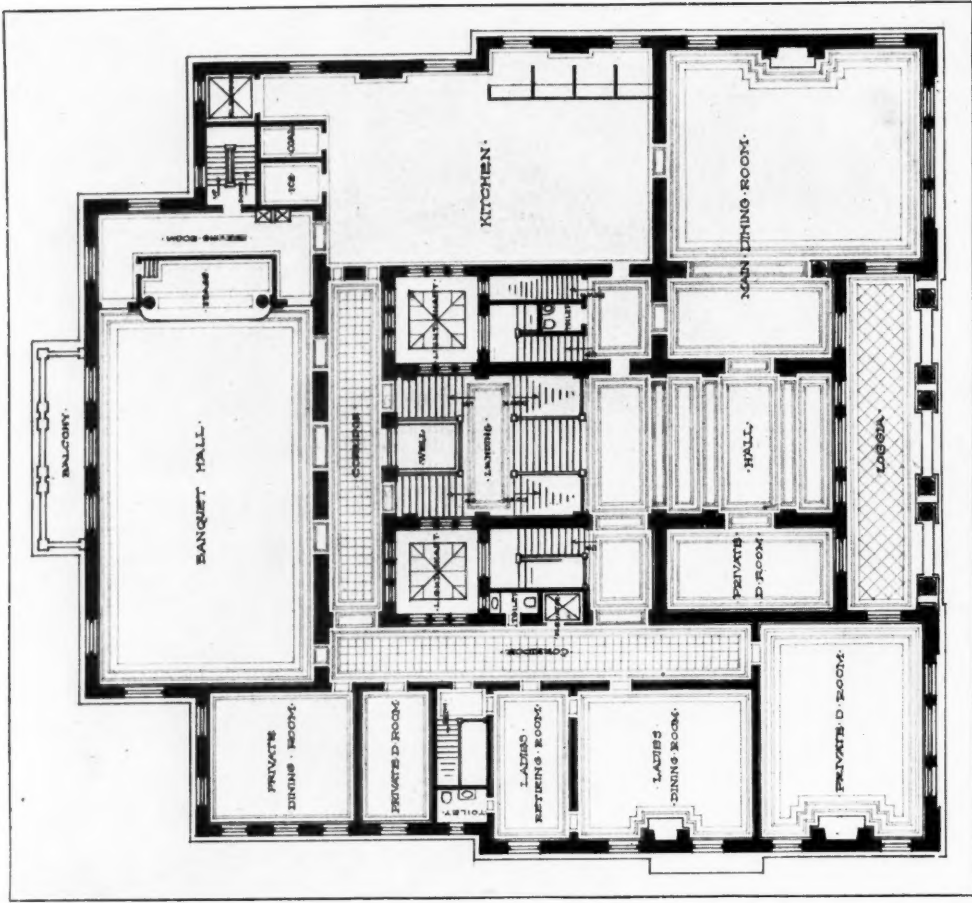
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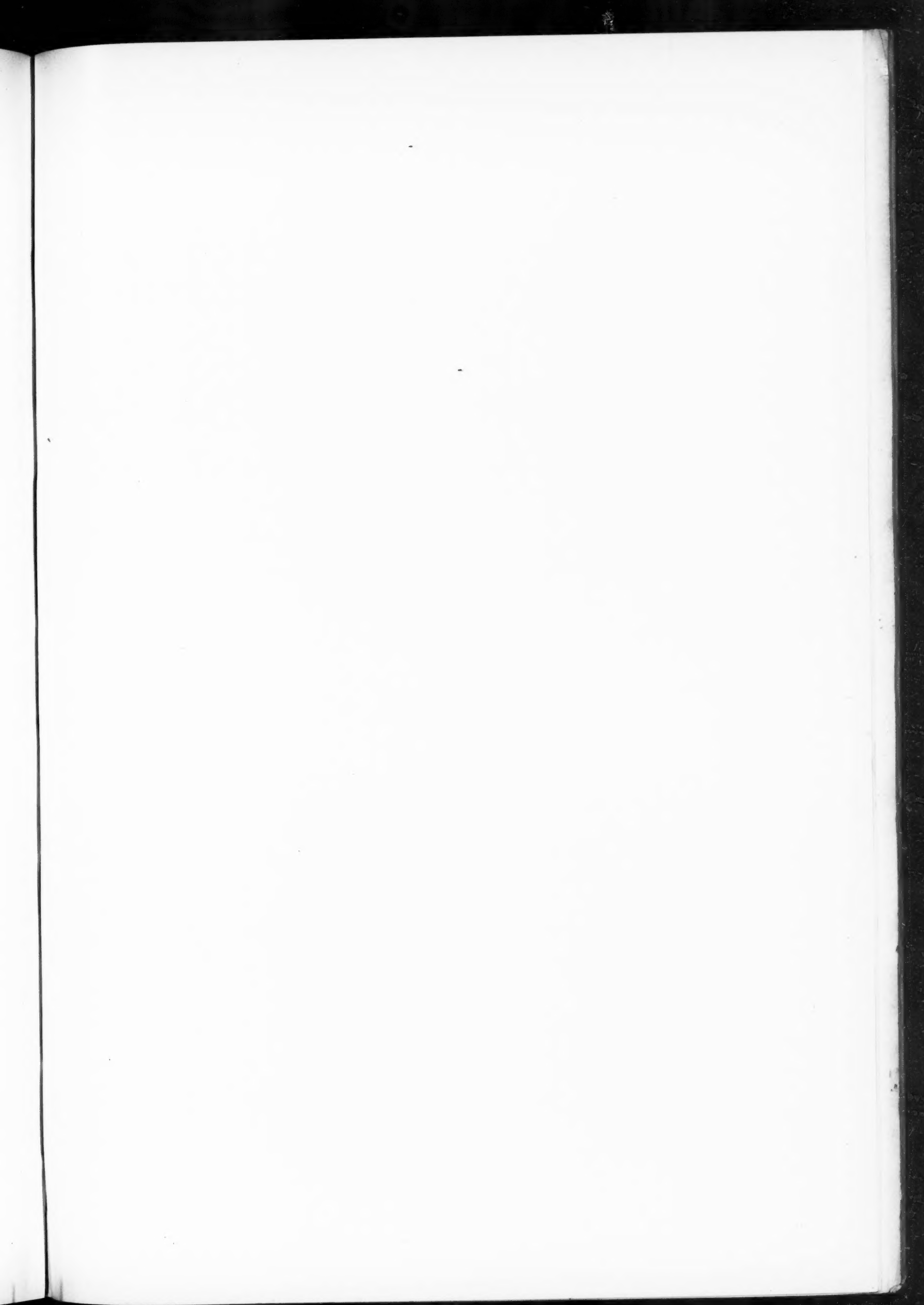


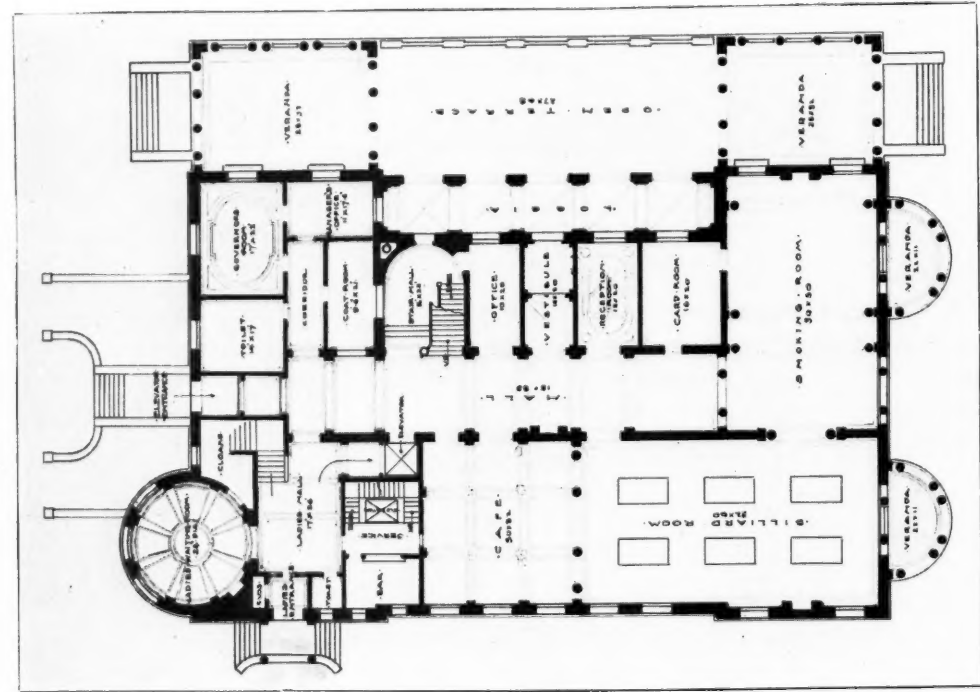


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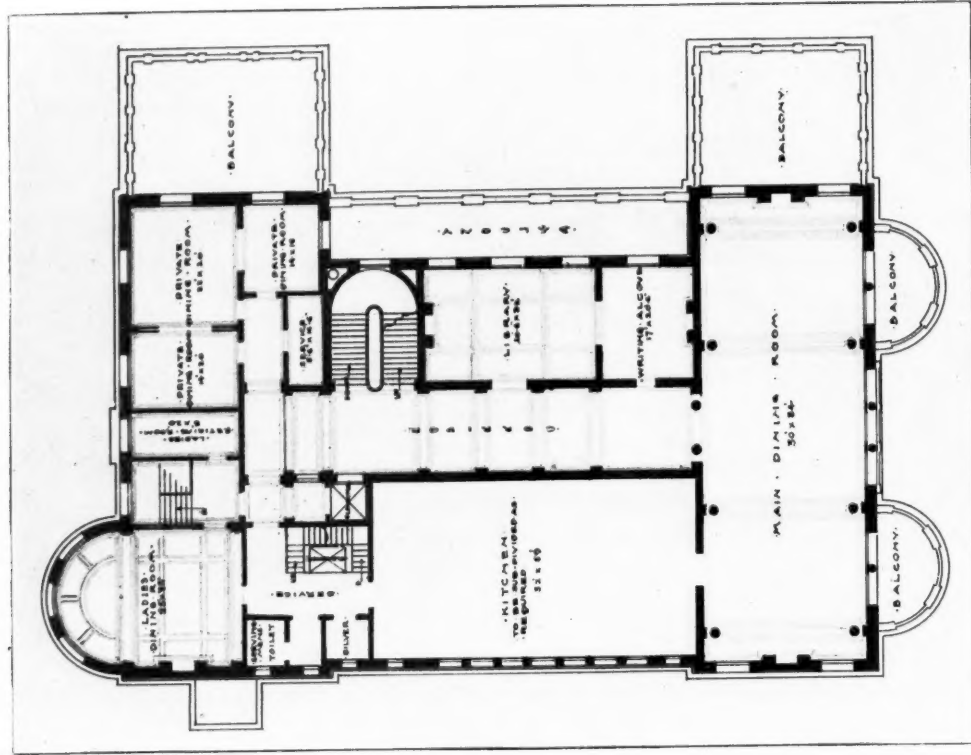


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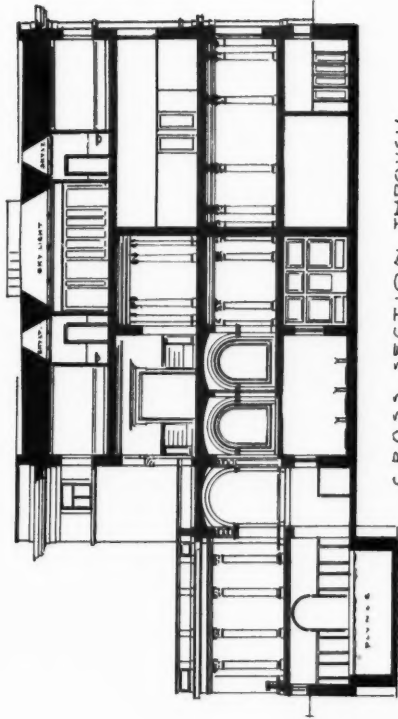
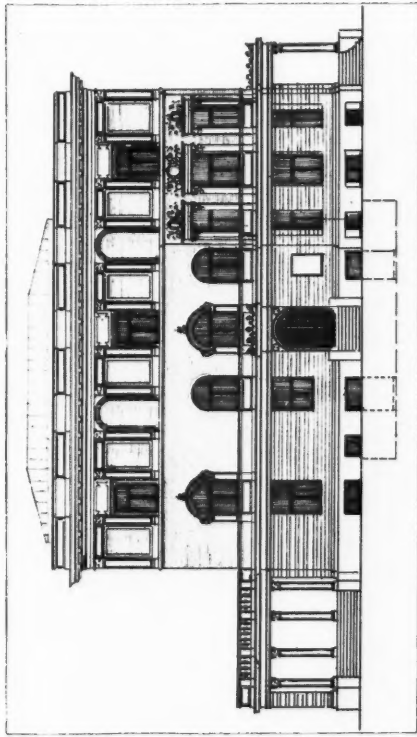


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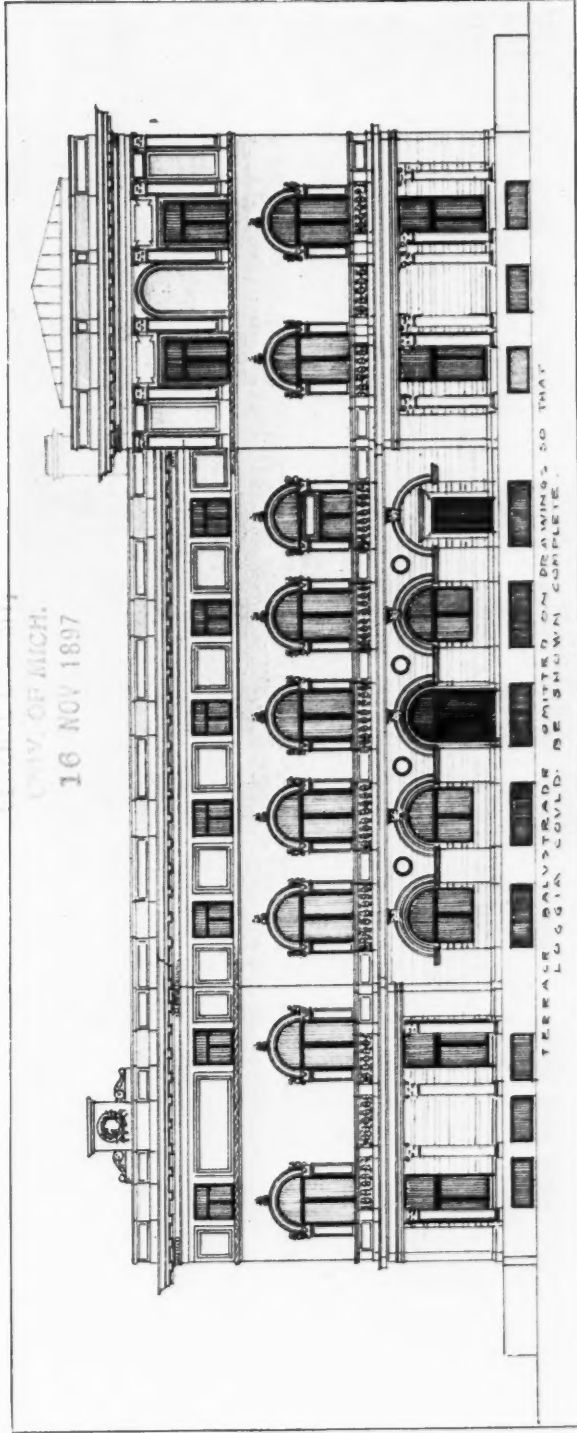
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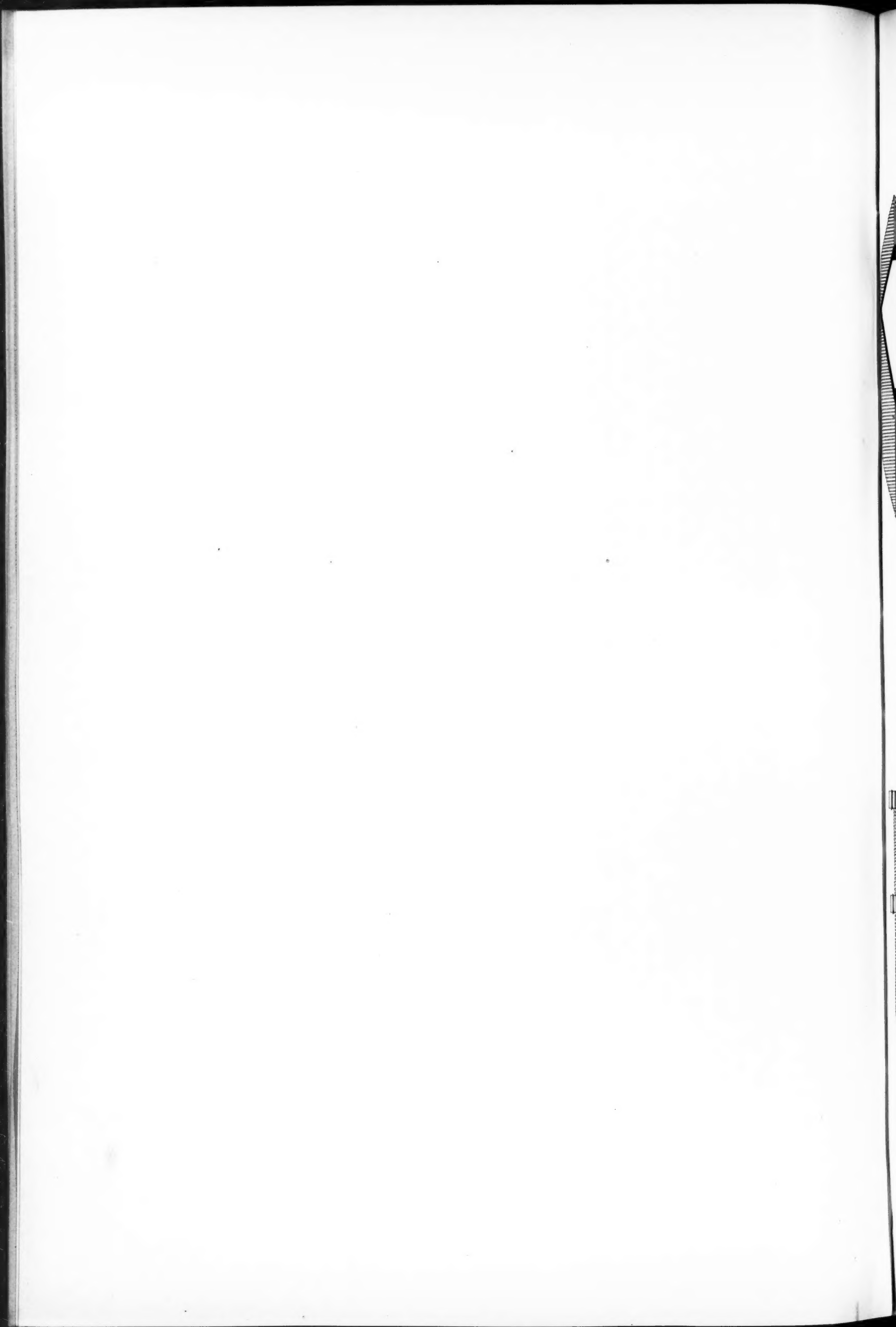
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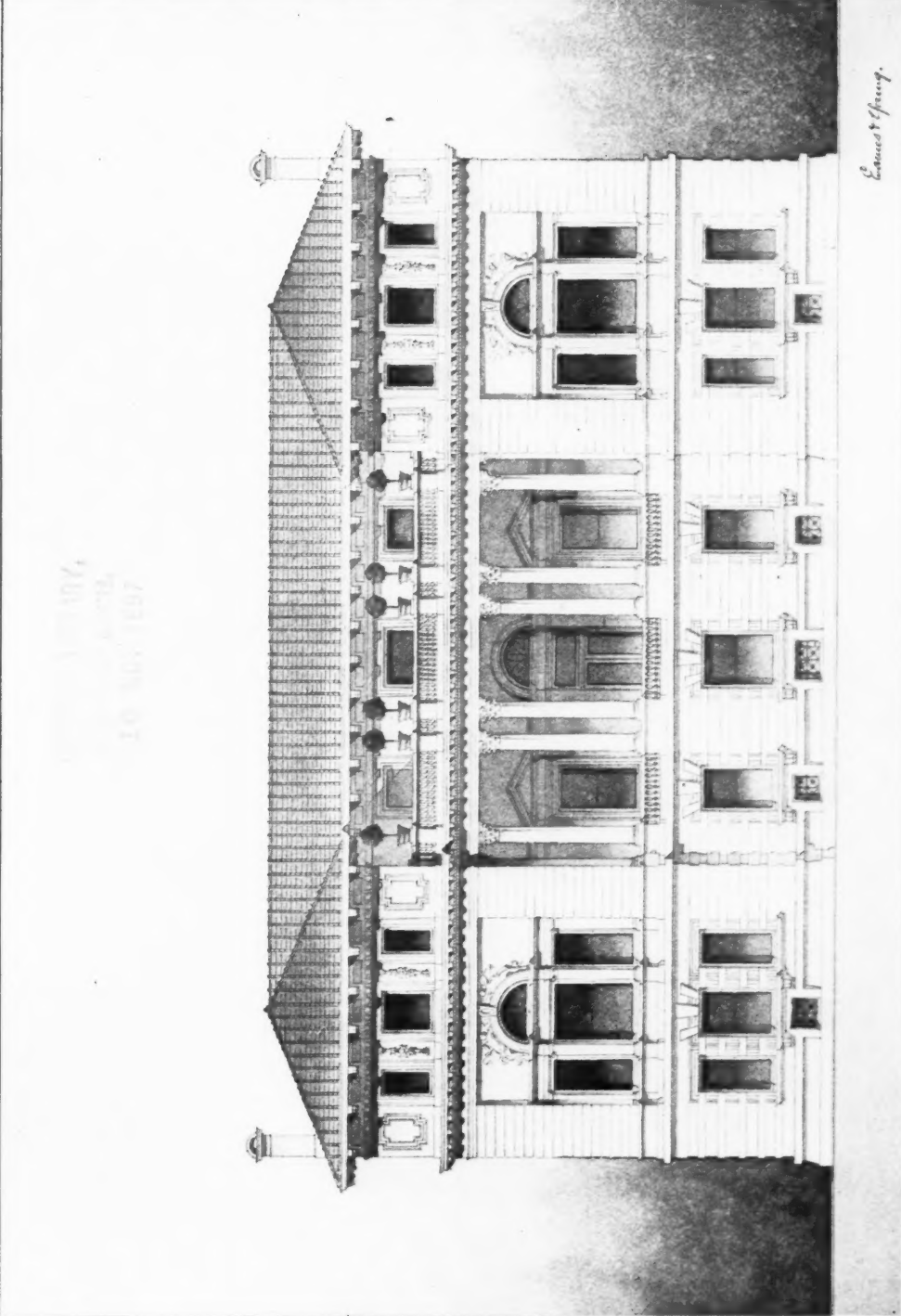
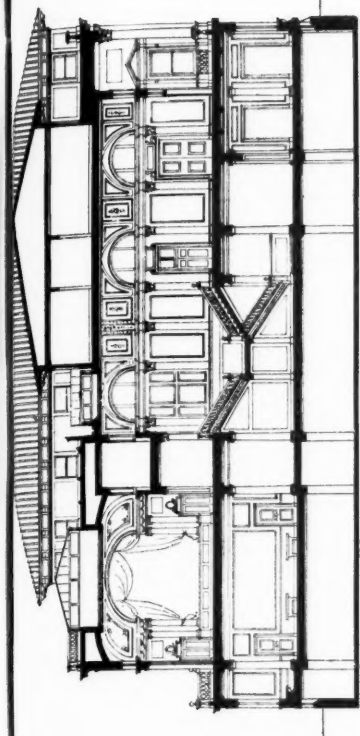
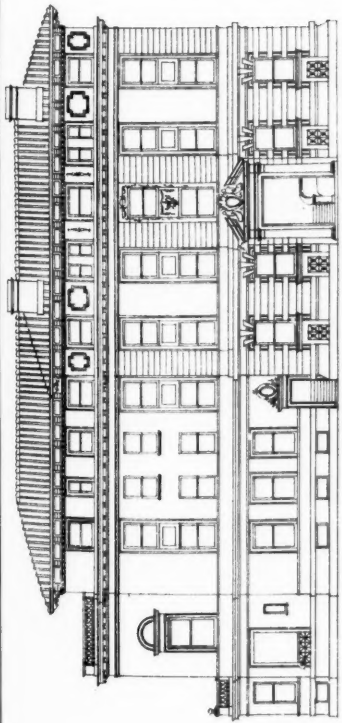


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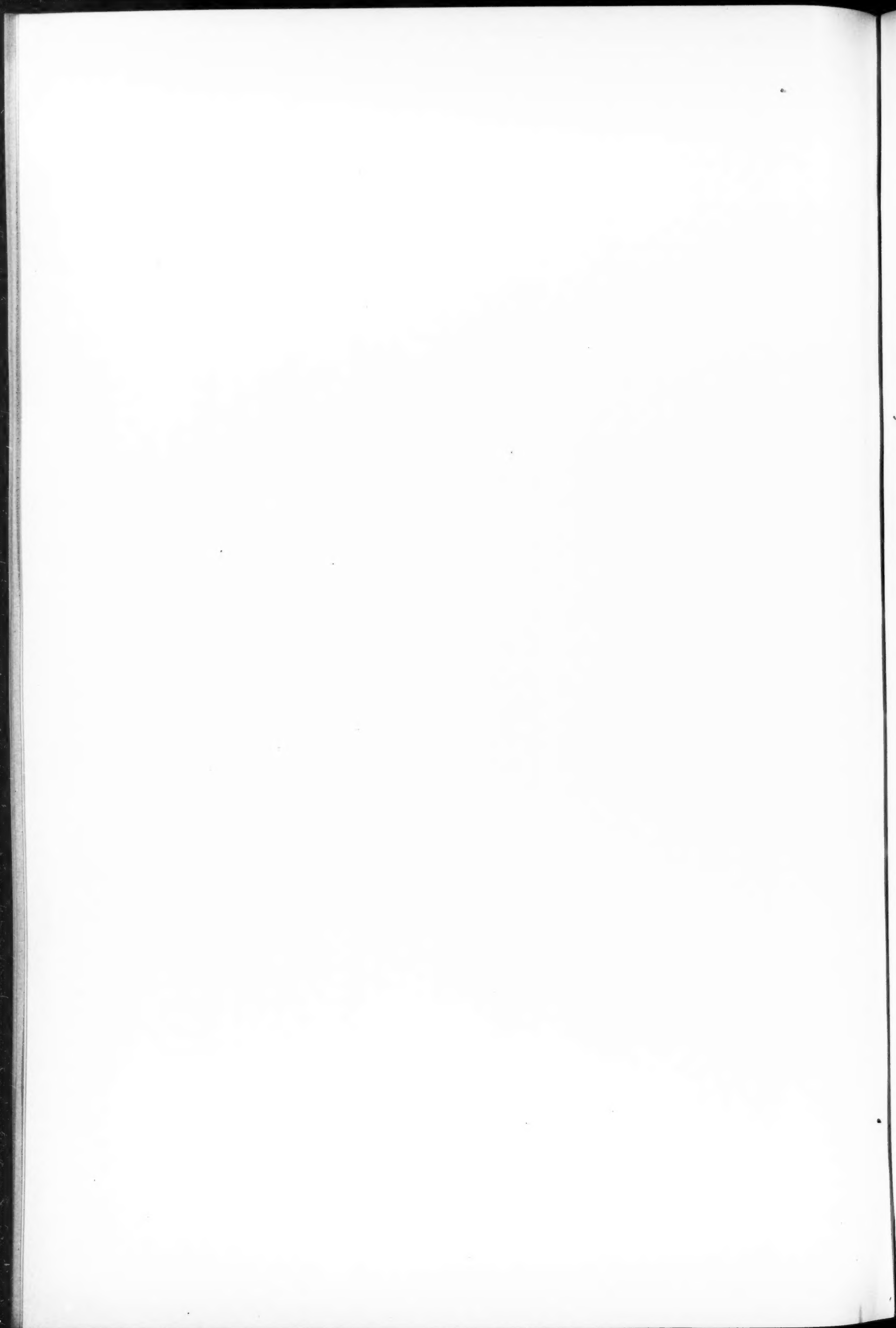
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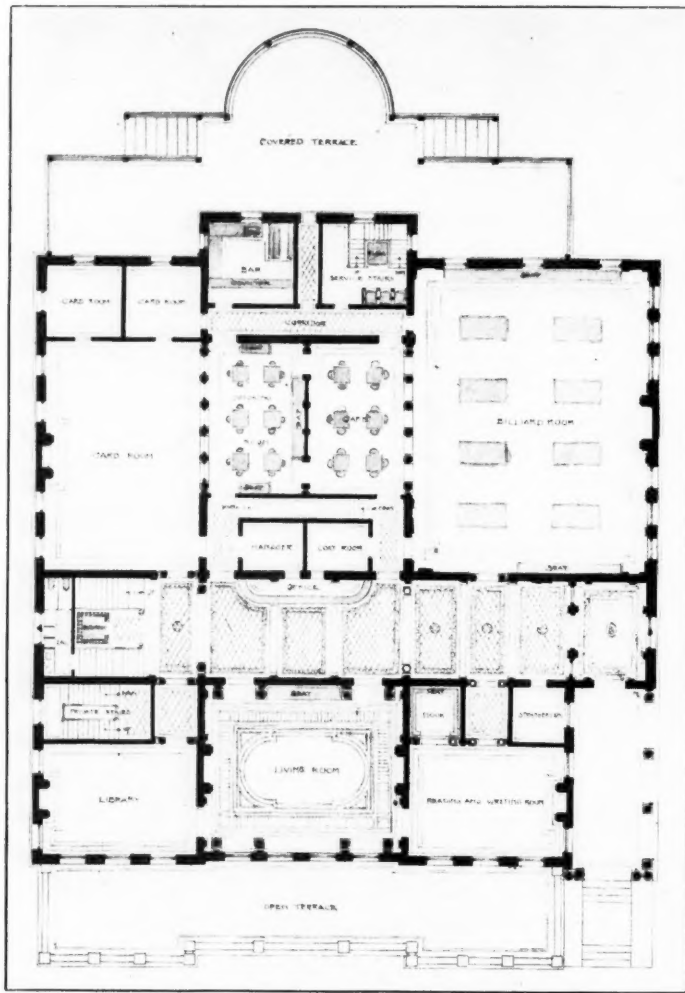
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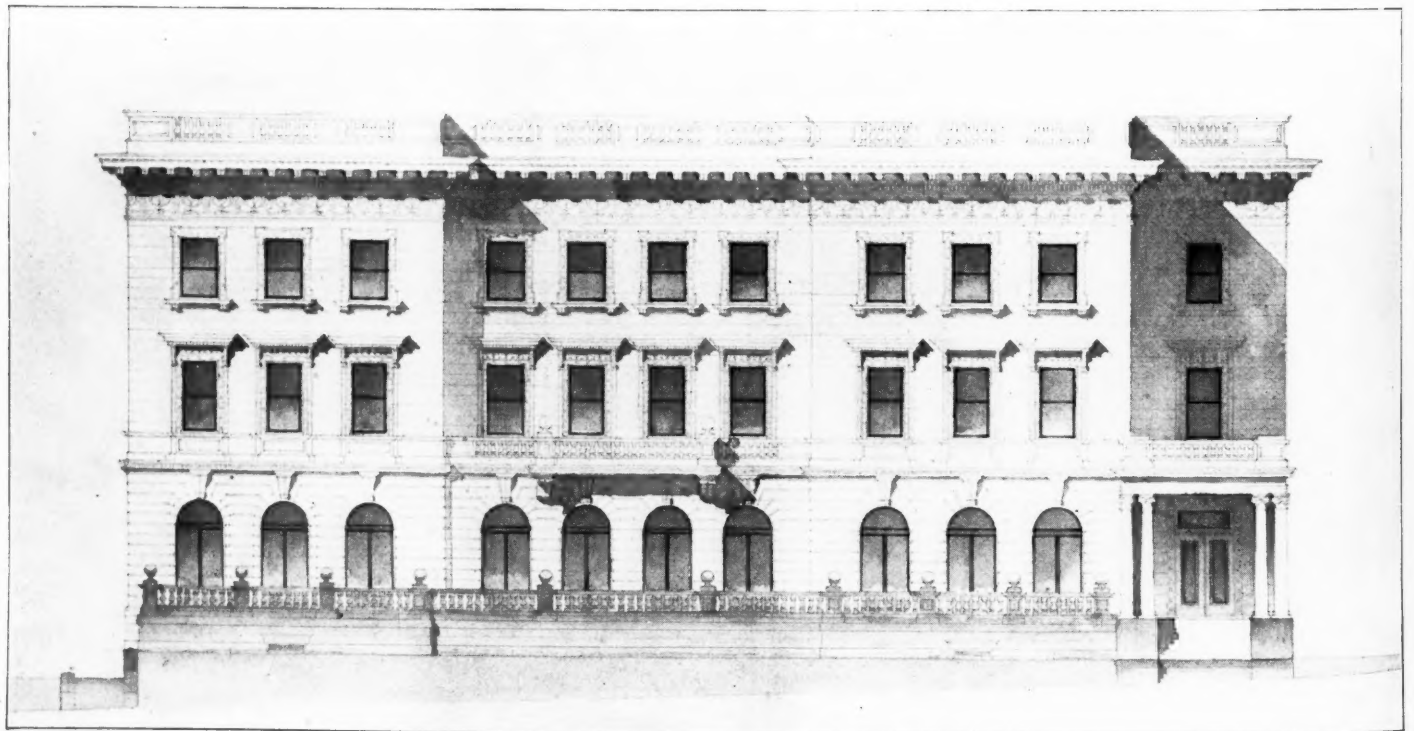
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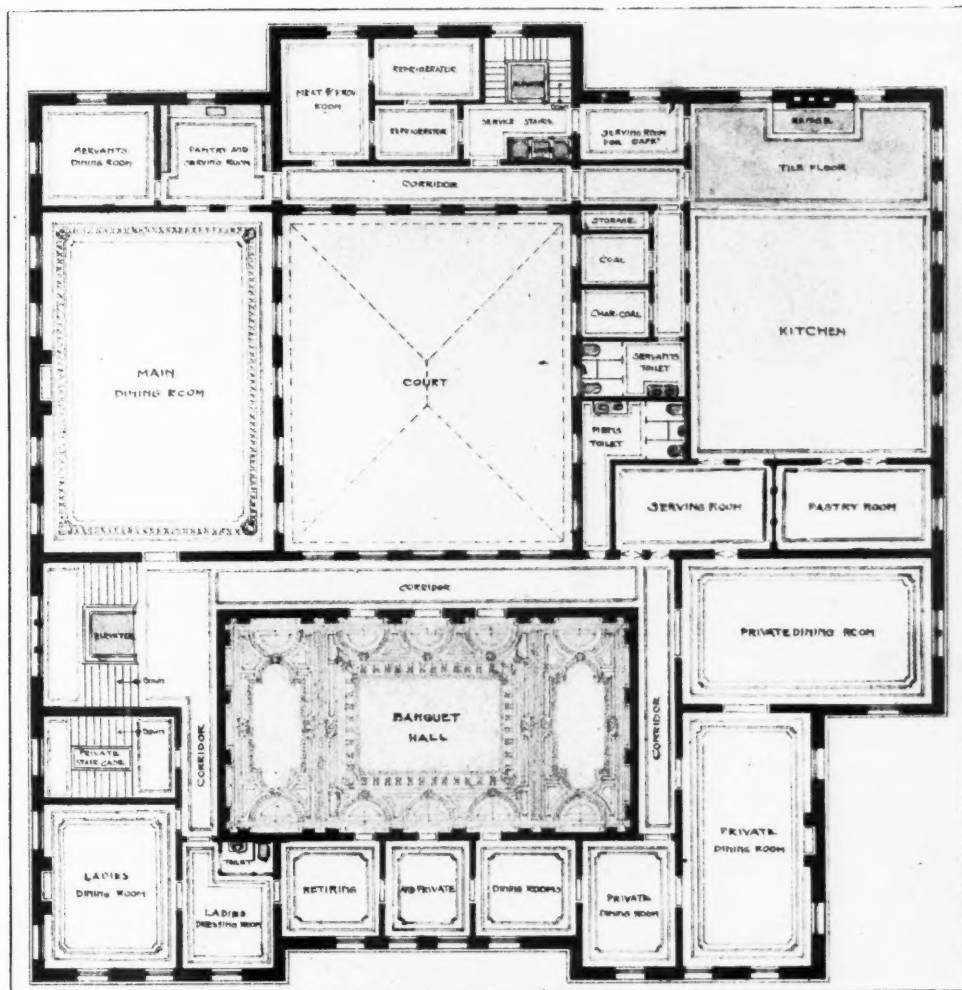
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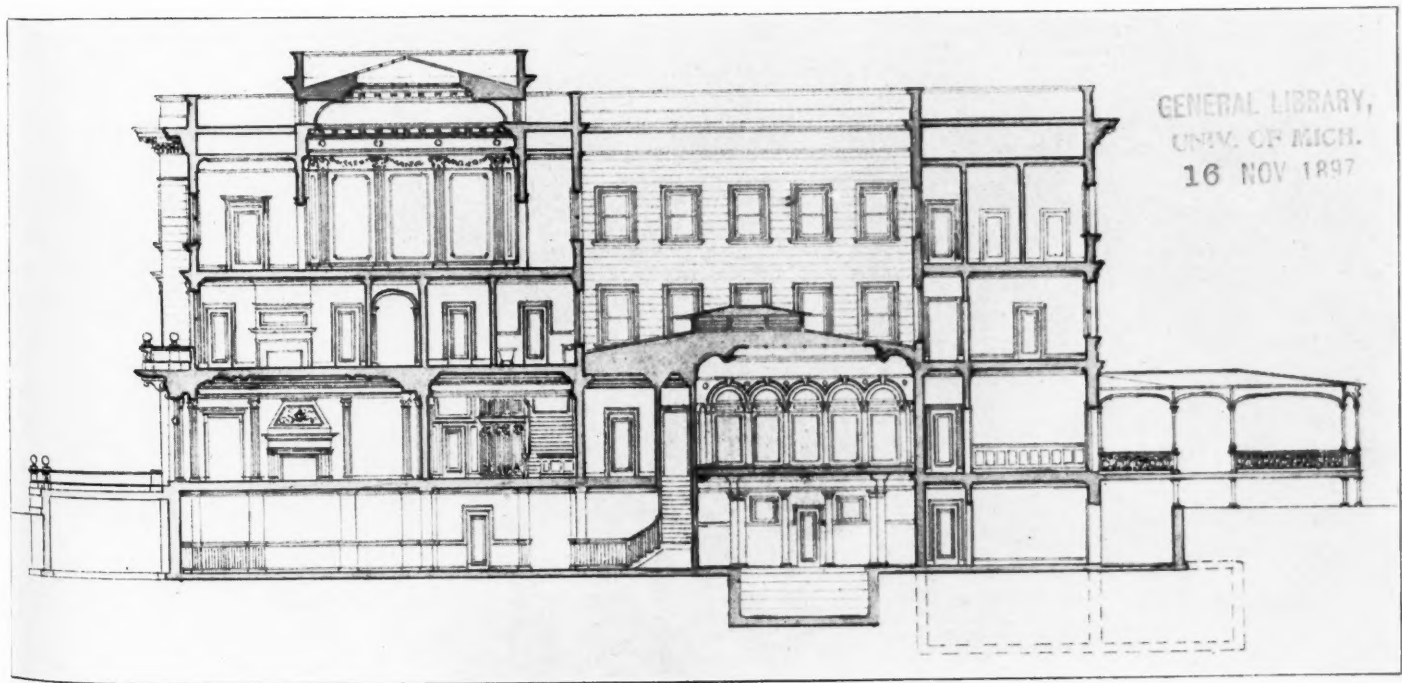
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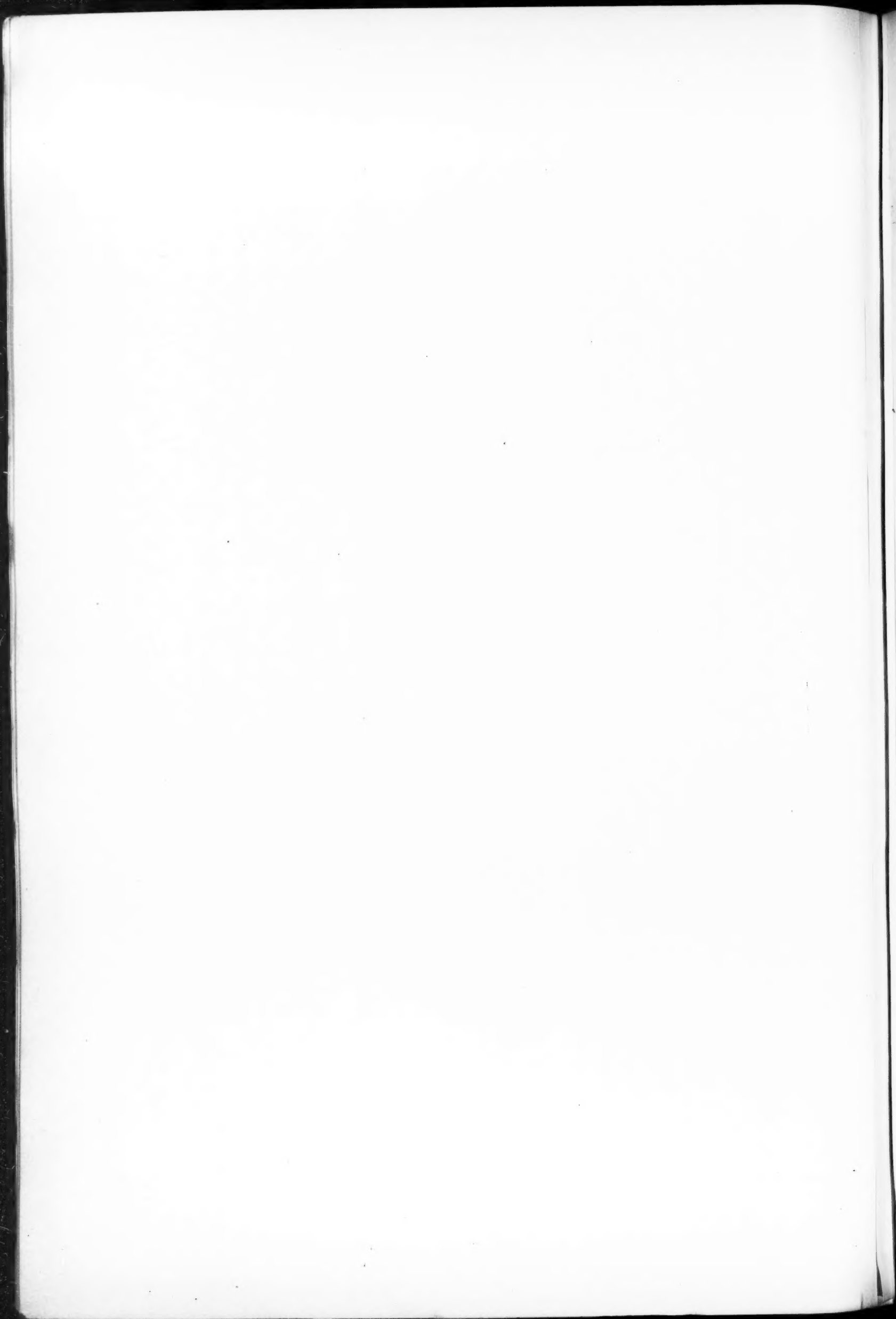
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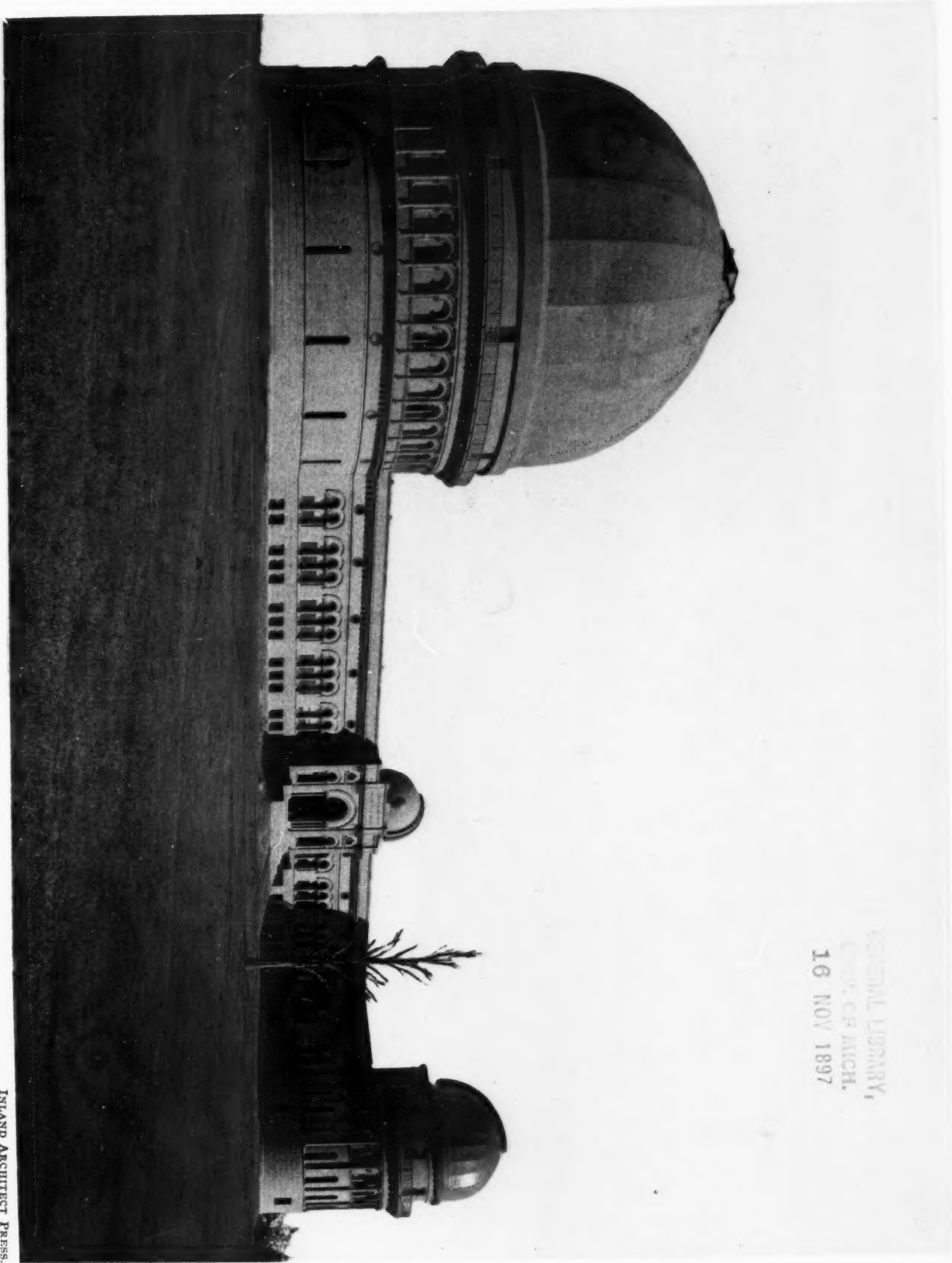
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